Omron Process Suite
Driver Help

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Omron Process Suite Driver Help

Help version 1.015

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Overview

The Omron Process Suite Driver provides an easy and reliable way to connect Omron Process Suite controllers to OPC Client applications, including HMI, SCADA, Historian, MES, ERP and countless custom applications. It is intended for use with Omron temperature controllers.

Device Setup

Supported Devices

E5AX-A, E5AX-AH, E5AX-DAA, E5AX-PRR, E5AX-VAA
E5AF-A
E5AJ-A
E5EJ-A
E5CN (thermocouple), E5CN (platinum resistance thermometer)
E5GN (thermocouple), E5GN (platinum resistance thermometer)

Communication Protocol

Sysway

Supported Communication Parameters

Baud Rate: 300, 600, 1200, 2400, 9600
Parity: Even
Data Bits: 7
Stop Bits: 2

Note: Not all devices support the listed configurations.

Ethernet Encapsulation

This driver supports Ethernet Encapsulation, which allows the driver to communicate with serial devices attached to an Ethernet network using a terminal server. It may be invoked through the COM ID dialog in Channel Properties. For more information, refer to the OPC server's help documentation.

Device IDs

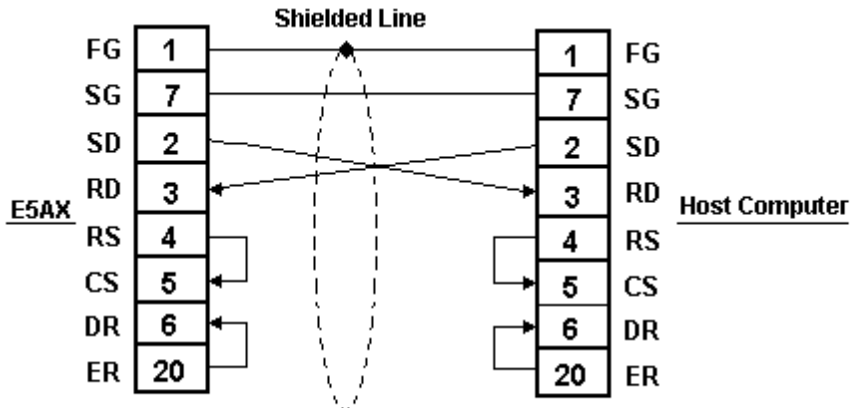
This parameter specifies the unique ID that will be used in order to communicate with other devices. The valid range is 0-99.

Flow Control

When using an RS232/RS485 converter, the type of flow control that is required depends on the needs of the converter. Some converters do not require any flow control whereas others require RTS flow. Consult the converter's documentation in order to determine its flow requirements. An RS485 converter that provides automatic flow control is recommended.

Note: When using the manufacturer's supplied communications cable, it is sometimes necessary to choose a flow control setting of **RTS** or **RTS Always** under the Channel Properties.

Cable Connections



Signal	Symbol	Pin
Frame Ground	FG	1
Signal Ground	SG	7
Send Data	SD	2
Receive Data	RD	3
Request to Send	RS	4
Clear to Send	CS	5
Data Set Ready	DR	6
Data Terminal Ready	ER	20

RS-232C

* Electrical Characteristics: Conform to EIA RS-232C
* Synchronization Clock: Internal Clock
* Transmission Length: 15 m max.
* Connector: D-Subminiature (25 contacts)
* Connection (with RS-232C): Point-to-Point (1-to-1 Connection)

Modem Setup

This driver supports modem functionality. For more information, please refer to the topic "Modem Support" in the OPC Server Help documentation.

Data Types Description

Data Type	Description
Boolean	Single bit
Word	Unsigned 16 bit value bit 0 is the low bit bit 15 is the high bit
Short	Signed 16 bit value bit 0 is the low bit bit 14 is the high bit bit 15 is the sign bit
DWord	Unsigned 32 bit value bit 0 is the low bit bit 31 is the high bit
Long	Signed 32 bit value bit 0 is the low bit bit 30 is the high bit bit 31 is the sign bit
Float	32 bit floating point value. The driver interprets two consecutive 16 bit registers as a floating-point value by making the second register the high word and the first register the low word.

Address Descriptions

The following models are supported by this driver.

E5AF-A
E5AF-AH
E5AJ-A
E5AX-A
E5AX-AH
E5AX-DAA
E5AX-PRR
E5AX-VAA
E5CN-PT
E5CN-TC
E5EJ-A
E5GN-PT
E5GN-TC

Notes:
1. E5CN-PT is for platinum resistance thermometer. The actual model number will differ.
2. E5CN-TC is for thermocouple. The actual model number will differ.
3. E5GN-PT is for platinum resistance thermometer. The actual model number will differ.
4. E5GN-TC is for thermocouple. The actual model number will differ.

E5AF-A Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data type	Access
AL-1	Alarm 1 set temperature. (-999-9999 deg TC)*(-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT. AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.	**Bool**	Read/Write
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure.	**Bool**	Read/Write

	Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.		
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
FU	Fuzzy intensity. (0-99%)	**Short**, **Word**	Read/Write
FU-S-1	Fuzzy scale 1. (0.2-999.9 deg)	**Float**, DWord, Long	Read/Write
FU-S-2	Fuzzy scale 2. (0.2-99.9 deg)	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.***** TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.***** (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value.	**Float**, DWord, Long	Read Only

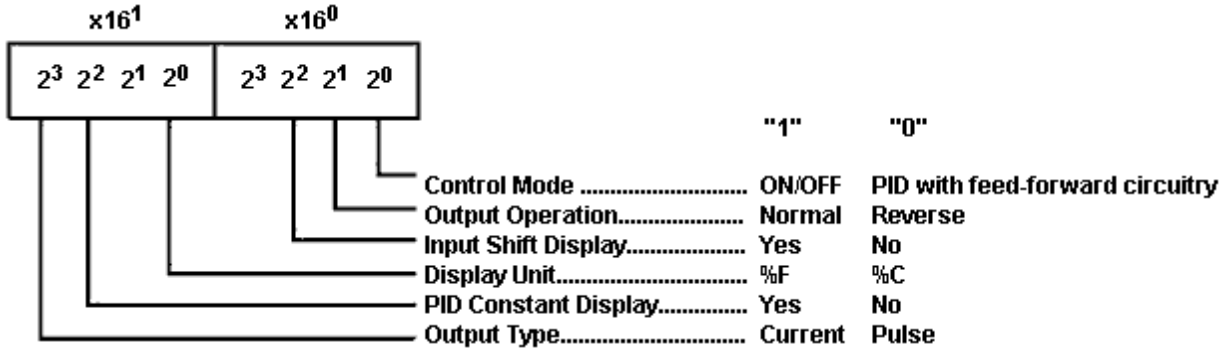
	(0.0-100.0%)		
O-TYPE	Output type.***** TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.***** TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.***** TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).******	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.

**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AF-AH Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-999-9999 deg TC)*(-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT. AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.	**Bool**	Read/Write
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.0-50 A)	**Float**, DWord, Long	Read Only

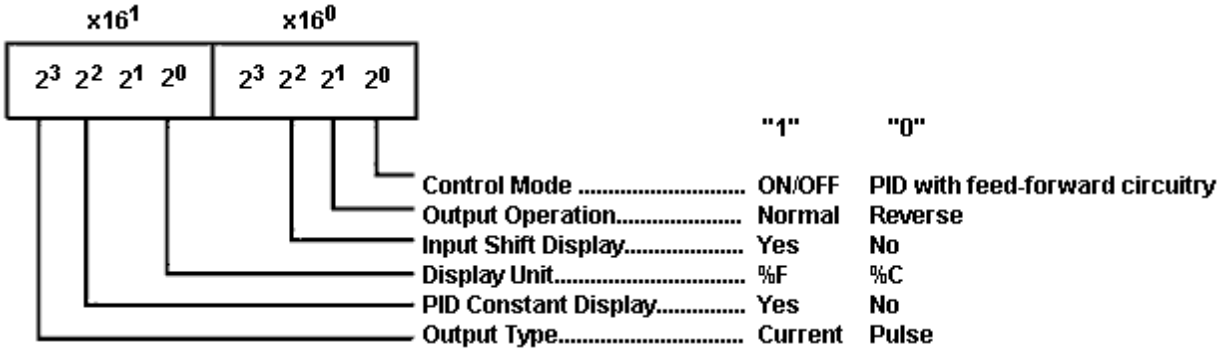
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
FU	(0-99%) Fuzzy intensity.	**Short, Word**	Read/Write
FU-S-1	Fuzzy scale 1. (0.2-999.9 deg)	**Float**, DWord, Long	Read/Write
FU-S-2	Fuzzy scale 2. (0.2-99.9 deg)	**Float**, DWord, Long	Read/Write
HB	Heater burnout set temperature. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.*	**Bool**	Read Only

	TRUE = normal (cooling) FALSE = reverse (heating)		
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AJ-A Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-1999-9999 deg TC)*(-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-1999-9999 deg TC) (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.2-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only

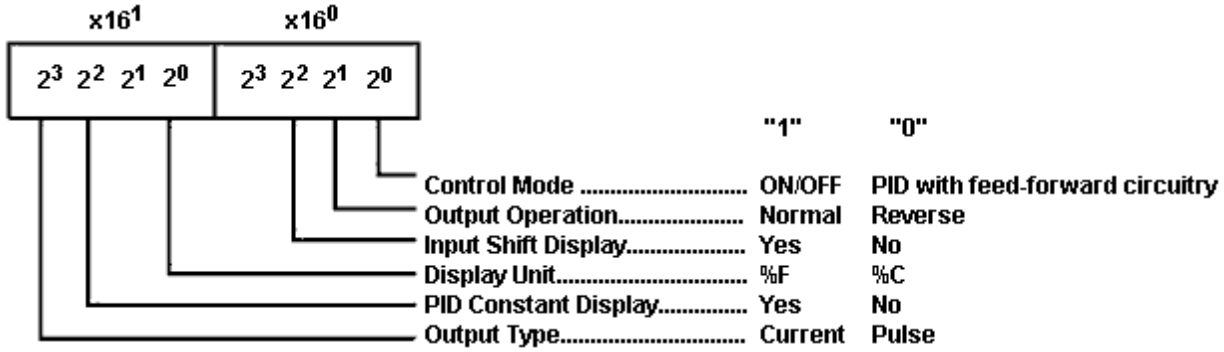
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-1999-9999 deg TC) (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:**The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-1999-9999 deg TC) (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read Only

	Note: Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.		
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. (setting range: SL-L-SL-H)	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AX-A Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-999-9999 deg TC)*(-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT. AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.	**Bool**	Read/Write
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure . Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only

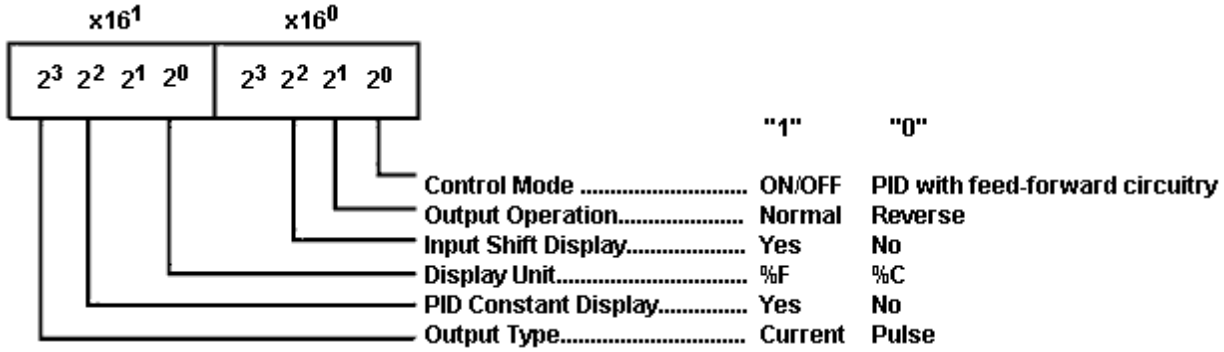
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only

RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode"is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AX-AH Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature.	**Float**, DWord, Long	Read/Write

	(-999-9999 deg TC)*(-99.9-999.9 deg Pt)		
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT. AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.	**Bool**	Read/Write
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.0-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.*	**Bool**	Read Only

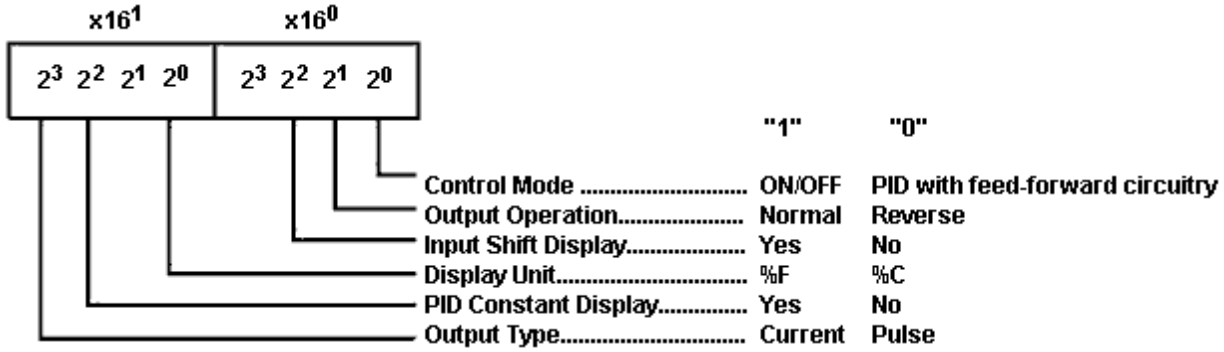
	TRUE = enabled FALSE = disabled		
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable.	**Bool**	Read Only

	TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.		
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AX-DAA Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-999-9999 deg TC)*(-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write

AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT. AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.	**Bool**	Read/Write
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image	**Short**, Word	Read Only

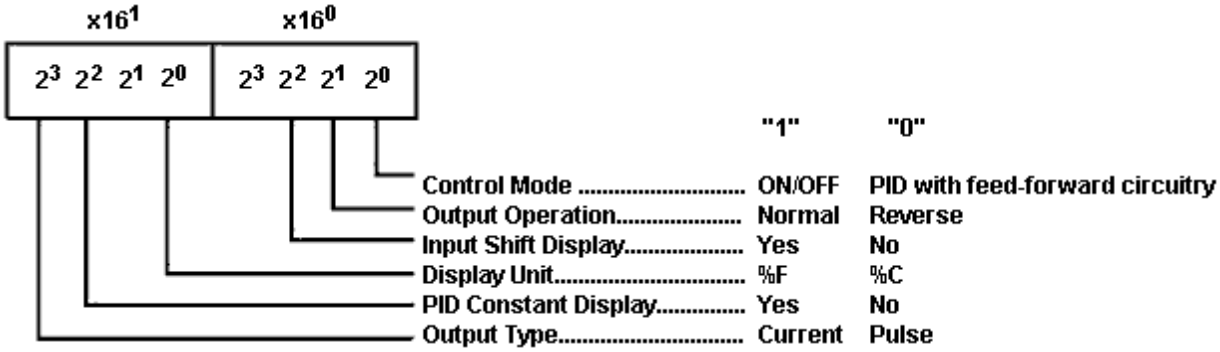
	below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL		
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only

REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AX-PRR Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-999-9999 deg TC)*(-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-999-9999 deg TC)	**Float**, DWord, Long	Read/Write

	(-99.9-999.9 deg Pt)		
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT. AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.	**Bool**	Read/Write
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag	**Short**, Word	Read Only

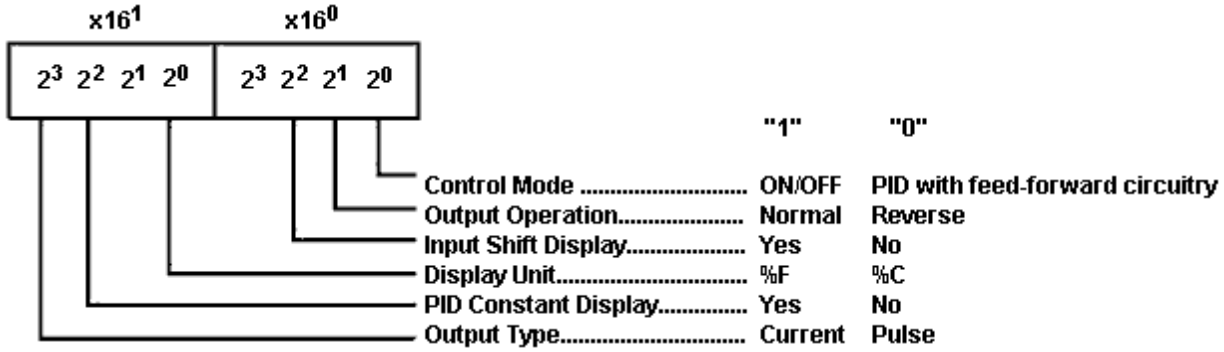
	For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL		
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-MD-S	Output mode shift. TRUE = manual FALSE = auto	**Bool**	Read/Write
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:**If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable.	**Bool**	Read Only

	TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.		
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5AX-VAA Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-999-9999 deg TC)*(-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AT	Auto tuning in progress. Write TRUE to start AT. Write FALSE to stop AT.	**Bool**	Read/Write

	AT will remain TRUE until the device completes the auto tuning procedure (or the user terminates it). Driver will not accept any write commands other than AT=FALSE during auto tuning.		
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
C-DB	Dead band set temperature. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
C-SC	Cooling coefficient. (0.1-99.9)	**Float**, DWord, Long	Read/Write
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-999-9999 deg TC) (-99.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses:	**Short**, Word	Read Only

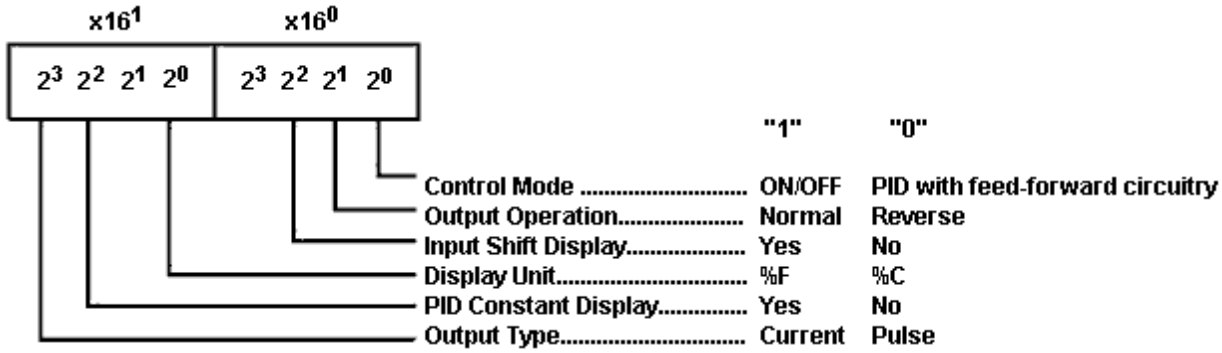
	AL-1-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL		
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-999-9999 deg TC) (-99.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled	**Bool**	Read Only

	State is forced TRUE by shorting appropriate terminals on device.		
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5CN-PT Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read:	**Bool**	Read/Write

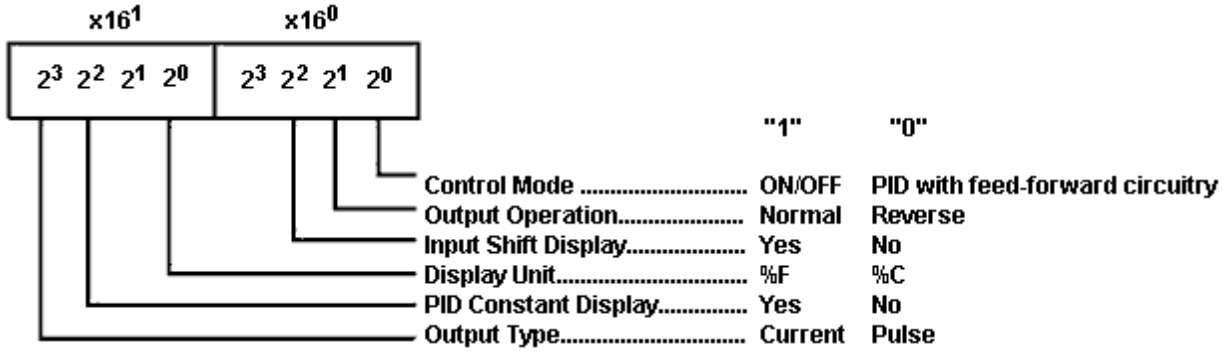
	TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.		
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.2-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-1999-9999 deg TC) (-199.9-999.9 deg Pt	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-1999-9999 deg TC) (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-4)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value.	**Float**, DWord, Long	Read Only

	(0.0-100.0%)		
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-199.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:**If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5CN-TC Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure. Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.2-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.*	**Bool**	Read Only

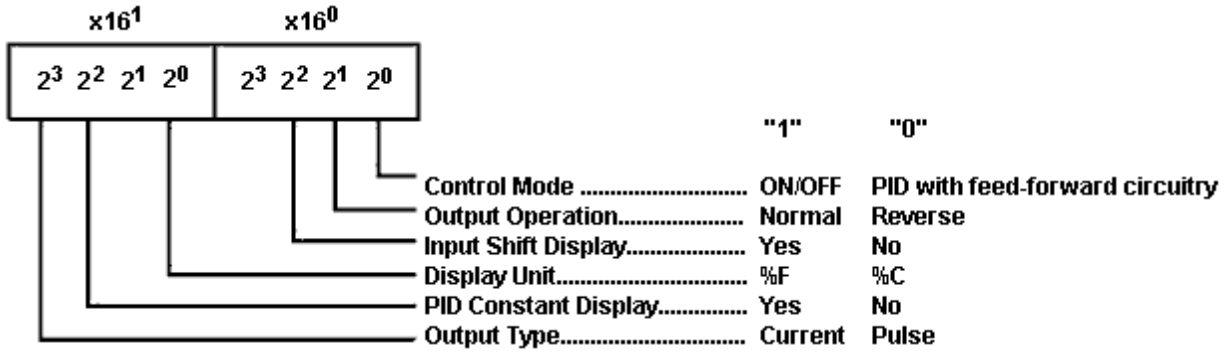
	TRUE = "On/Off" FALSE = "2-degree of freedom PID"		
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type. (0-16)*	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature).	**Float**, DWord, Long	Read Only

	(-1999-9999 deg TC) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.		
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5EJ-A Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-1999-9999 deg TC)*(-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-1999-9999 deg TC) (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.2-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-1999-9999 deg TC) (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
I	Reset time set value.	**Short**, Word	Read/Write

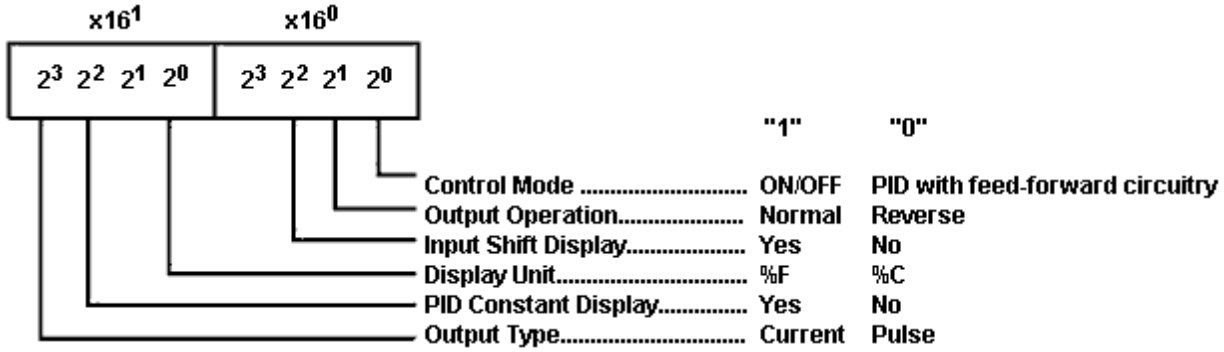
	(0-3999 s)		
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-9)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-1999-9999 deg TC) (-199.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command.	**Bool**	Read Only

	Note: If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.		
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5GN-PT Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature.	**Float**, DWord, Long	Read/Write

	(-199.9-999.9 deg Pt)		
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current **Note:** Device will be unresponsive for approximately 500 ms during backup.	**Bool**	Read/Write
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.2-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-199.9-999.9 deg Pt	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-199.9-999.9 deg Pt)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type.* (0-4)	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD	**Short**, Word	Read Only

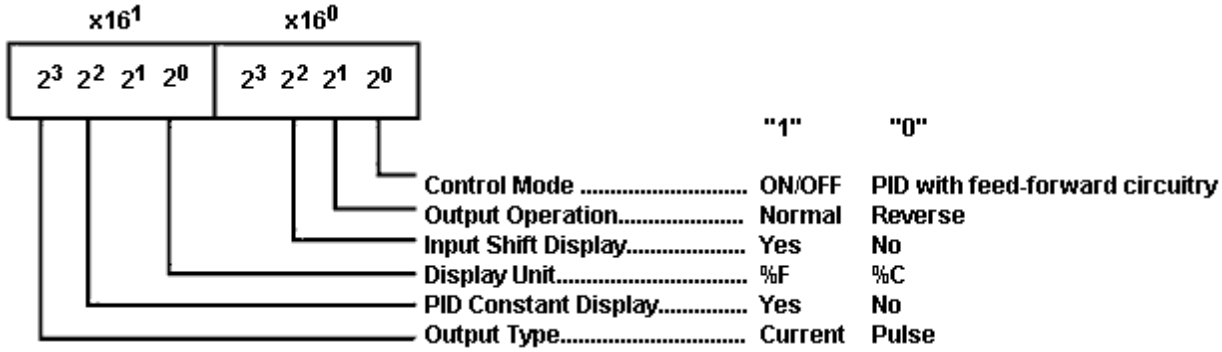
	AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL		
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling) FALSE = reverse (heating)	**Bool**	Read Only
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-199.9-999.9 deg Pt) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only

SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format



E5GN-TC Address Description

The default data types are shown in **bold**.

Mnemonic	Description	Data Type	Access
AL-1	Alarm 1 set temperature. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
AL-1-MD	Alarm 1 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-1-OUT	Alarm 1 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
AL-2	Alarm 2 set temperature. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
AL-2-MD	Alarm 2 mode of operation.* (0-9)	**Short**, Word	Read Only
AL-2-OUT	Alarm 2 output status. TRUE = alarm on FALSE = alarm off	**Bool**	Read Only
BACKUP	Backup RAM to non-volatile memory. Write: Anything to initiate backup procedure Read: TRUE = non-volatile memory is not current FALSE = non-volatile memory is current	**Bool**	Read/Write

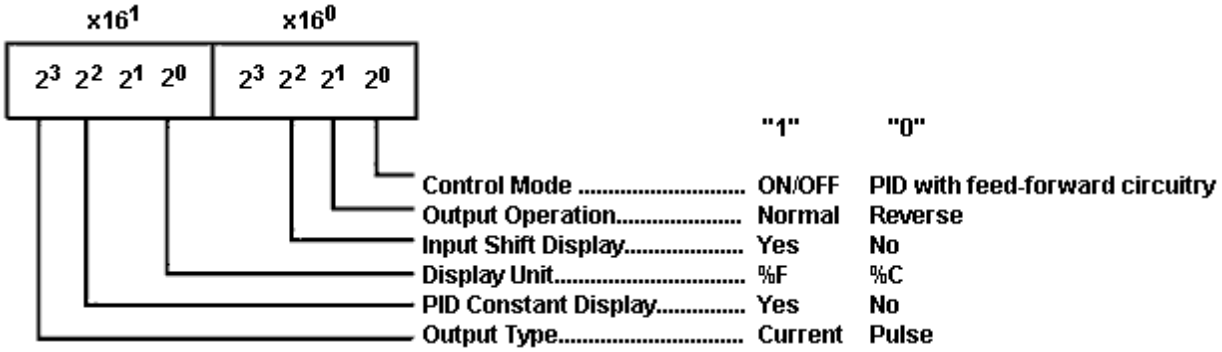
	Note: Device will be unresponsive for approximately 500 ms during backup.		
BURNOUT	Heater burnout detected. TRUE = heater burnout detected FALSE = heater OK	**Bool**	Read Only
CT	Heater current. (0.2-50.0 A)	**Float**, DWord, Long	Read Only
CTR-MD	Control mode of operation.* TRUE = "On/Off" FALSE = "2-degree of freedom PID"	**Bool**	Read Only
D	Rate time set value. (0-3999 s)	**Short**, Word	Read/Write
DSPL-UNIT	Display unit.* TRUE = degrees F FALSE = degrees C	**Bool**	Read Only
HB	Heater burnout set temperature. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
I	Reset time set value. (0-3999 s)	**Short**, Word	Read/Write
IN-S	Input shift set value. (-1999-9999 deg TC)	**Float**, DWord, Long	Read/Write
IN-S_DSPL	Input shift display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
IN-T	Input (sensor) type. (0-16)*	**Short**, Word	Read Only
INITIALSTATUS	Initial Status tag For information on the INITIALSTATUS value, refer to the image below. **Note:** The INITIALSTATUS value is read during initial device setup communications and when reading the following addresses: AL-1-MD AL-2-MD CTR-MD DSPL-UNIT IN-S_DSPL IN-T O-TYPE O-OP PID-DSPL	**Short**, Word	Read Only
O	Output value. (0.0-100.0%)	**Float**, DWord, Long	Read Only
O-TYPE	Output type.* TRUE = current FALSE = pulse	**Bool**	Read Only
O-OP	Output mode of operation.* TRUE = normal (cooling)	**Bool**	Read Only

	FALSE = reverse (heating)		
P	Proportional band set value. (0.0-999.9 deg)	**Float**, DWord, Long	Read/Write
PID-DSPL	PID display enable.* TRUE = enabled FALSE = disabled	**Bool**	Read Only
PV	Process value (measured temperature). (-1999-9999 deg TC) **Note:** Since hardware status information is passed back to the driver with the PV value, it is important that this memory location be monitored. If a hardware failure should occur (device failure, heater burnout, sensor failure), it will be detected and reported by the driver only during a PV read operation.	**Float**, DWord, Long	Read Only
RAM-MD	RAM mode enable. TRUE = RAM mode FALSE = backup mode The driver will automatically force the device into RAM mode to prevent wear on non-volatile memory. Users may backup the contents of RAM by issuing a BACKUP command. **Note:** If "Remote Mode" is not selected on the device's front panel, the driver will not be able to automatically force the device into RAM mode. The RMT button and RMT status indicator are located on the front panel.	**Bool**	Read Only
REMOTE	Remote Mode enable. TRUE = device in Remote Mode FALSE = device in Local Mode The driver will not be able to write to the device unless Remote Mode is selected on the device front panel.	**Bool**	Read Only
SL-H	Set point limit (high).**	**Float**, DWord, Long	Read Only
SL-L	Set point limit (low).**	**Float**, DWord, Long	Read Only
SP-S-IN	Set point shift input state. TRUE = shift enabled FALSE = shift disabled State is forced TRUE by shorting appropriate terminals on device.	**Bool**	Read Only
SV	Set value temperature. Setting range: SL-L-SL-H.	**Float**, DWord, Long	Read/Write
ADCERR	A/D Converter Error/Failure	Boolean	Read Only
SENSERR	Abnormal Input/Sensor Error	Boolean	Read Only
RAMERR	RAM Data Error	Boolean	Read Only

*This is a hardware setting. For more information, refer to the device's help documentation.
**This value must be set on device front panel. For information on the valid ranges, refer to the device's help documentation.

Note: TC denotes temperature range for thermocouple sensor types. Pt denotes temperature range for platinum resistance thermometer sensor types. All stated temperature ranges are numerically equal for degrees F and C.

INITIALSTATUS Value Format


x16^1
x16^0
2^3 2^2 2^1 2^0
2^3 2^2 2^1 2^0
"1"
"0"
Control Mode ..... ON/OFF PID with feed-forward circuitry
Output Operation..... Normal Reverse
Input Shift Display..... Yes No
Display Unit..... %F %C
PID Constant Display..... Yes No
Output Type..... Current Pulse

Error Descriptions

The following error/warning messages may be generated. Click on the link for a description of the message.

Address Validation

Missing address
Device address '<address>' contains a syntax error
Address '<address>' is out of range for the specified device or register
Device address '<address>' is not supported by model '<model name>'
Data Type '<type>' is not valid for device address '<address>'
Device address '<address>' is Read Only

Serial Communications

COMn does not exist
Error opening COMn
COMn is in use by another application
Unable to set comm parameters on COMn
Communications error on '<channel name>' [<error mask>]

Device Status Messages

Device '<device name>' is not responding
Unable to write to '<address>' on device '<device name>'

Omron Process Suite Messages

Bad address in block [<start address> to <end address>] on device '<device name>'
COMMUNICATIONS ERROR (device in Local Mode or auto tuning) - <device name>.<address>
COMMUNICATIONS ERROR (parity) - <device name>.<address>
COMMUNICATIONS ERROR (framing) - <device name>.<address>
COMMUNICATIONS ERROR (register overrun) - <device name>.<address>
COMMUNICATIONS ERROR (check sum) - <device name>.<address>
COMMUNICATIONS ERROR (format) - <device name>.<address>
COMMUNICATIONS ERROR (device rejected data) - <device name>.<address>
DEVICE ERROR - Overflow error - <device name>.<address>
DEVICE ERROR - Underflow error - <device name>.<address>
DEVICE ERROR - RAM data error - <device name>.<address>
DEVICE ERROR - A to D converter error - <device name>.<address>
DEVICE ERROR - Sensor error - <device name>.<address>

Address Validation

The following error/warning messages may be generated. Click on the link for a description of the message.

Address Validation

Missing address
Device address '<address>' contains a syntax error
Address '<address>' is out of range for the specified device or register
Device address '<address>' is not supported by model '<model name>'
Data Type '<type>' is not valid for device address '<address>'
Device address '<address>' is Read Only

Missing address

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically has no length.

Solution:
Re-enter the address in the client application.

Device address '<address>' contains a syntax error

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically contains one or more invalid characters.

Solution:
Re-enter the address in the client application.

Address '<address>' is out of range for the specified device or register

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically references a location that is beyond the range of supported locations for the device.

Solution:
Verify that the address is correct; if it is not, re-enter it in the client application.

Device address '<address>' is not supported by model '<model name>'

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically references a location that is valid for the communications protocol but not supported by the target device.

Solution:
Verify that the address is correct; if it is not, re-enter it in the client application. Also verify that the selected model name for the device is correct.

Data Type '<type>' is not valid for device address '<address>'

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically has been assigned an invalid data type.

Solution:
Modify the requested data type in the client application.

Device address '<address>' is Read Only

Error Type:
Warning

Possible Cause:
A tag address that has been specified statically has a requested access mode that is not compatible with what the device supports for that address.

Solution:
Change the access mode in the client application.

Serial Communications

The following error/warning messages may be generated. Click on the link for a description of the message.

Serial Communications
COMn does not exist

COMn does not exist

Error Type:
Fatal

Possible Cause:
The specified COM port is not present on the target computer.

Solution:
Verify that the proper COM port has been selected in the Channel Properties.

Error opening COMn

Error Type:
Fatal

Possible Cause:
The specified COM port could not be opened due to an internal hardware or software problem on the target computer.

Solution:
Verify that the COM port is functional and may be accessed by other Windows applications.

COMn is in use by another application

Error Type:
Fatal

Possible Cause:
The serial port assigned to a channel is being used by another application.

Solution:
1. Verify that the correct port has been assigned to the channel.
2. Close the other application that is using the requested COM port.

Unable to set comm parameters on COMn

Error Type:
Fatal

Possible Cause:
The serial parameters for the specified COM port are not valid.

Solution:
Verify the serial parameters and make any necessary changes.

Communications error on '<channel name>' [<error mask>]

Error Type:
Warning

Error Mask Definitions:
B = Hardware break detected.
F = Framing error.
E = I/O error.
O = Character buffer overrun.
R = RX buffer overrun.
P = Received byte parity error.
T = TX buffer full.

Possible Cause:
1. The serial connection between the device and the Host PC is bad.
2. The communication parameters for the serial connection are incorrect.
3. There is a noise source disrupting communications somewhere in the cabling path between the PC and the device.

Solution:
1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Reroute cabling to avoid sources of electrical interference such as motors, generators or high voltage lines.

Device Status Messages

The following error/warning messages may be generated. Click on the link for a description of the message.

Device Status Messages
Device '<device name>' is not responding
Unable to write to '<address>' on device '<device name>'

Device '<device name>' is not responding

Error Type:
Serious

Possible Cause:
1. The serial connection between the device and the Host PC is broken.
2. The communication parameters for the serial connection are incorrect.
3. The named device may have been assigned an incorrect Network ID.
4. The response from the device took longer to receive than the amount of time specified in the "Request Timeout" device setting.

Solution:
1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Verify that the Network ID given to the named device matches that of the actual device.
4. Increase the Request Timeout setting so that the entire response can be handled.

Unable to write to '<address>' on device '<device name>'

Error Type:
Serious

Possible Cause:
1. The serial connection between the device and the Host PC is broken.
2. The communication parameters for the serial connection are incorrect.
3. The named device may have been assigned an incorrect Network ID.

Solution:
1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Verify that the Network ID given to the named device matches that of the actual device.

Omron Process Suite Messages

The following error/warning messages may be generated. Click on the link for a description of the message.

Omron Process Suite Messages
Bad address in block [<start address> to <end address>] on device '<device name>'
COMMUNICATIONS ERROR (device in Local Mode or auto tuning) - <device name>.<address>
COMMUNICATIONS ERROR (parity) - <device name>.<address>
COMMUNICATIONS ERROR (framing) - <device name>.<address>
COMMUNICATIONS ERROR (register overrun) - <device name>.<address>
COMMUNICATIONS ERROR (check sum) - <device name>.<address>
COMMUNICATIONS ERROR (format) - <device name>.<address>
COMMUNICATIONS ERROR (device rejected data) - <device name>.<address>
DEVICE ERROR - Overflow error - <device name>.<address>

Bad address in block [<start address> to <end address>] on device '<device name>'

Error Type:
Serious

Possible Cause:
An attempt has been made to reference a nonexistent location in the specified device.

Solution:
Verify that the tags assigned to addresses in the specified range on the device are valid. Eliminate ones that reference invalid locations.

COMMUNICATIONS ERROR (device in Local Mode or auto tuning) - <device name>.<address>

Error Type:
Warning

Possible Cause:
An attempt was made to write to the device while it is in Local Mode (or is auto tuning).

Solution:
1. If the device is in Local Mode, switch it to Remote Mode from the front panel.
2. If the device is auto tuning, either wait for the procedure to complete automatically or terminate it. Auto tuning can be terminated from the device front panel or remotely by issuing a write AT=FALSE command.

COMMUNICATIONS ERROR (parity) - <device name>.<address>

Error Type:
Warning

Possible Cause:
The device received a frame of information containing an incorrect parity bit. This means that there is either noise in the cabling or faulty connections.

Solution:
Make sure that cables are properly shielded and that maximum length has not been exceeded (15 m for RS-232C, 500 m for RS-485). Make sure that cables and connectors are electrically sound.

COMMUNICATIONS ERROR (framing) - <device name>.<address>

Error Type:
Warning

Possible Cause:
The device received a frame of information with a stop bit of "0". This means that there is either noise in the cabling or faulty connections.

Solution:
Make sure that cables are properly shielded and that maximum length has not been exceeded (15 m for RS-232C, 500 m for RS-485). Make sure that cables and connectors are electrically sound.

COMMUNICATIONS ERROR (register overrun) - <device name>.<address>

Error Type:
Warning

Possible Cause:
An attempt was made to send new data to the device when its receive data register is already full.

Solution:
Re-enter the data.

COMMUNICATIONS ERROR (check sum) - <device name>.<address>

Error Type:
Warning

Possible Cause:
The frame check sequence is in error. This means that there is either noise in the cabling or faulty connections.

Solution:
Make sure that cables are properly shielded and that maximum length has not been exceeded (15 m for RS-232C, 500 m for RS-485). Make sure that cables and connectors are electrically sound.

COMMUNICATIONS ERROR (format) - <device name>.<address>

Error Type:
Warning

Possible Cause:
The device received a frame of information that is of the wrong length. This means that there is either noise in the cabling or faulty connections.

Solution:
Make sure that cables are properly shielded and that maximum length has not been exceeded (15 m for RS-232C, 500 m for RS-485). Make sure that cables and connectors are electrically sound.

COMMUNICATIONS ERROR (device rejected data) - <device name>.<address>

Error Type:
Warning

Possible Cause:
Invalid data has been sent to the device. The device will reject all data it does not recognize as valid, leaving the contents of the memory location unchanged.

Solution:
Make sure the value that will be written makes sense for the memory location. Re-enter the correct value. For example, the device would reject a write request for SV=100 if SL-H=50 had been previously set since SV must be less than SL-H.

DEVICE ERROR - Overflow error - <device name>.<address>

Error Type:
Warning

Possible Cause:
1. Sensor failure.
2. The temperature being measured is higher than the upper limit of the device, or its shifted value is beyond the range of the device display.

Solution:
1. Check the sensor connection and replace the sensor if needed.
2. Consider changing the input shift value or employing other hardware that would be more suitable for the application.

DEVICE ERROR - Underflow error - <device name>.<address>

Error Type:
Warning

Possible Cause:

The temperature being measured is lower than the lower limit of the device, or its shifted value is beyond the range of the device display.

Solution:
If the problem is persistent, consider changing the input shift value or employing other hardware that would be more suitable for the application.

DEVICE ERROR - RAM data error - <device name>.<address>

Error Type:
Serious

Possible Cause
There was an error in writing to RAM.

Solution:
Re-enter the data. If the problem persists, repair the device.

DEVICE ERROR - A to D converter error - <device name>.<address>

Error Type:
Serious

Possible Cause:
The device detected an analog to digital converter failure.

Solution:
Repair the device.

DEVICE ERROR - Sensor error - <device name>.<address>

Error Type:
Serious

Possible Cause:
The device has detected a sensor failure.

Solution:
Ensure that the sensor is in working order and is connected to the device properly.

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