



Important Product Information

Analog Input Modules

GFK-2765A
Aug 2012

Before using the units

To use the units safely and effectively, please read this document and refer to GFK-2745 & network adapter user manuals for further details.

Warnings and Cautions

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use. In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

Warning!

- Installing or removing modules or wiring with power applied to the system or field wiring can cause an electrical arc. This can result in unexpected and potentially dangerous action by field devices. Arcing is an explosion risk in hazardous locations. Be sure that the area is non-hazardous or remove power appropriately before installing or removing modules or wiring.
- Potentially dangerous voltages are present on a module's terminals, even when system power is turned off. Field power must be turned off when installing or removing a Terminal Block assembly.
- Personnel who install, operate and maintain automation systems that contain these products must be trained and qualified to perform those functions.
- Overloading power modules or Network adapter can result into electric arc & damage to modules.

Caution notices are used where equipment might be damaged if care is not taken.

Caution!

- Check the rated voltage and terminal array before wiring.
- Ensure that specified environmental conditions are not exceeded. Avoid placing the module in direct sunlight.
- Review module specifications carefully, and ensure that input and output connections are made in accordance with the specifications.
- Use specified cables for wiring.
- Field Power Isolators must be used according to the requirements of the 5VDC/24VDC/48VDC or AC Voltage modules used in the system.
- If system power consumption exceeds the power limits, use system power expansion modules.
- System power and field power must be supplied from separate sources.

1. Input Module Specifications*

Model	ST-3114	ST-3134	ST-3214	ST-3234	ST-3118	ST-3218	ST-3428	ST-3274
Channel	4 Channel				8 Channel			4 Channel
Input Range	0 ~ 20mA		4 ~ 20mA		0 ~ 20mA	4 ~ 20mA	0~10V	4 ~ 20mA
Type	Current						Voltage	Current
Resolution	12bit	14bit	12bit	14bit	12bit			12bit
connector	Terminal block							Sensor Connector
Accuracy	±0.1% Full Scale @25°C, ±0.3% Full Scale @ 0°C, 60°C							
Input Impedance	120Ω						500KΩ	120Ω
Update Time	4ms / All channel							
Module current consumption	165mA/5Vdc				60mA/5Vdc			40mA/5Vdc
Common	4 Channels / 2COM (Single Common)				No common terminal in the module, Field Power 0V is Common (AGND)			
Isolation	Photo coupler isolation							
Surrounding Air Temp./ Ambient Temp	0°C to 55°C for UL applications ; 0°C to 60°C for non-UL applications ; Storage -40°C to 85°C							
Relative Humidity	5% ~ 90%, without condensation							

* Specifications and designs could be changed without advance notice

1. Input Module Specifications*

Model	ST-3424	ST-3444	ST-3524	ST-3544	ST-3624	ST-3644	ST-3702	ST-3802	ST-3704	ST-3708	ST-3804	ST-3808
Channel	4 Channel						2 Channel		4Ch	8Ch	4Ch	8Ch
Input Range	0~10V		-10V~10V		0~5V		RTD	TC	RTD		TC	
Type	Voltage						Ref1*	Ref2*	Ref1*		Ref2*	
Resolution	12bit	14bit	12bit	14bit	12bit	14bit	±0.1°C/ F, 10mΩ					
Special Function	-						Diagnostic					
Accuracy	±0.1% Full Scale @25°C, ±0.3% Full Scale @ 0°C, 60°C											
Input Impedance	500KΩ						-					
Update Time	4ms / All channel						200msec / All Channel		30msec/1Channel when Normal Conversion			
Module current consumption	165mA/5Vdc	170mA/5Vdc				70mA/5Vdc		100mA/5Vdc	110mA/5Vdc	120mA/5Vdc	140mA/5Vdc	
Common	4 Channels / 2COM (Single Common)						2 Channels/2COM (Single Common)		4 Common/Module			
Isolation	Photo coupler isolation											
Surrounding Air Temp./ Ambient Temp	0°C to 55°C for UL applications ; 0°C to 60°C for non-UL applications ; Storage -40°C to 85°C											
Relative Humidity	5% ~ 90%, without condensation											

Ref 1*	Sensor type: PT50, PT100, PT200, PT500, PT1000, JPT100, JPT200, JPT500, JPT1000, NI100, NI200, NI500, NI1000, NI120, CU10, Resistance 100mΩ/Bit, 10mΩ/Bit, 20mΩ/Bit
Ref 2*	Sensor type: Type K/J/T/B/R/S/E/N/L/U/C/D ; mV Input :10μV/Bit, 1μV/Bit, 2μV/Bit

2. Release Information

Part Number	ST-3114-AA	ST-3134-AA	ST-3214-AA	ST-3234-AA	ST-3118-AA	ST-3218-AA	ST-3428-AA	ST-3274-AA
HW Version	20.00	20.00	20.00	20.00	20.00	20.00	20.00	Under development
Firmware Revision	20.000	20.000	20.000	20.000	20.000	20.000	20.000	

Part Number	ST-3424-AA	ST-3444-AA	ST-3524-AA	ST-3544-AA	ST-3624-AA	ST-3644-AA	ST-3702-AA	ST-3802-AA	ST-3704-AA	ST-3708-AA	ST-3804-AA	ST-3808-AA
HW Version	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Firmware Revision	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000

3. Electronic Documentation

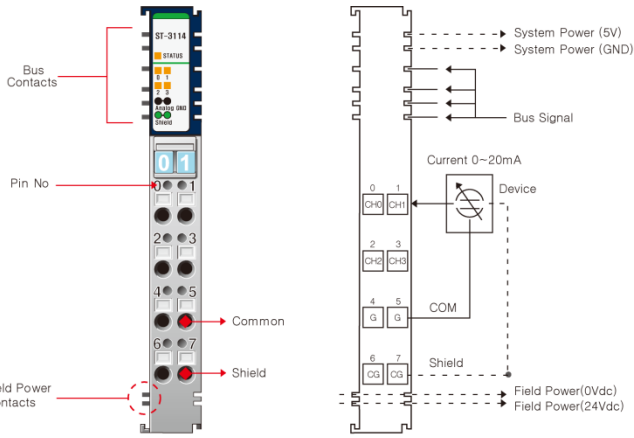
Manuals:

PACSystems RSTi I/O User Manual, GFK-2745
PACSystems RSTi Network Adapter User Manuals

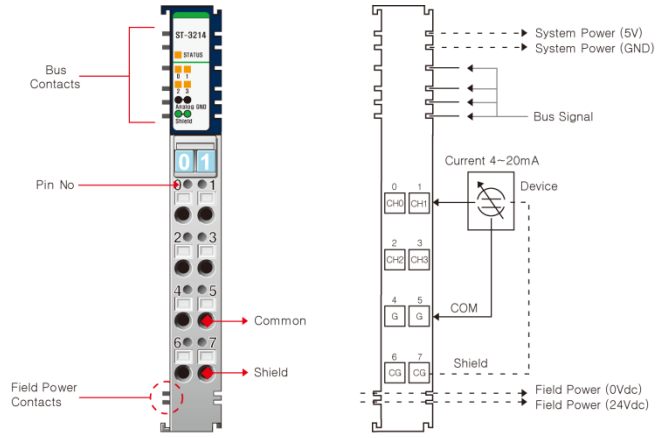
The most recent user documents are available on the Support website: <http://www.ge-ip.com/support>

4. Input wiring Diagrams

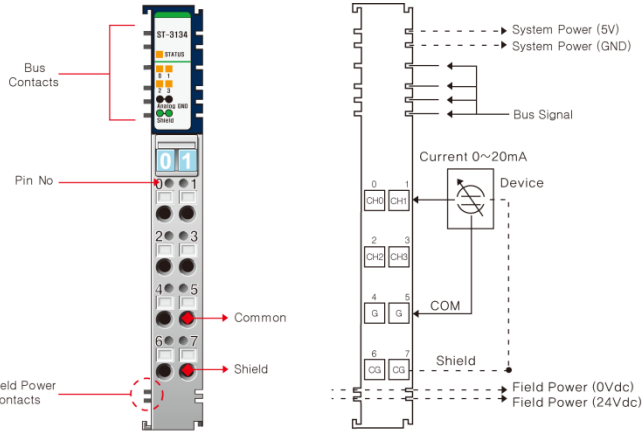
ST-3114 : 4 channels Current 0~20mA 12bit



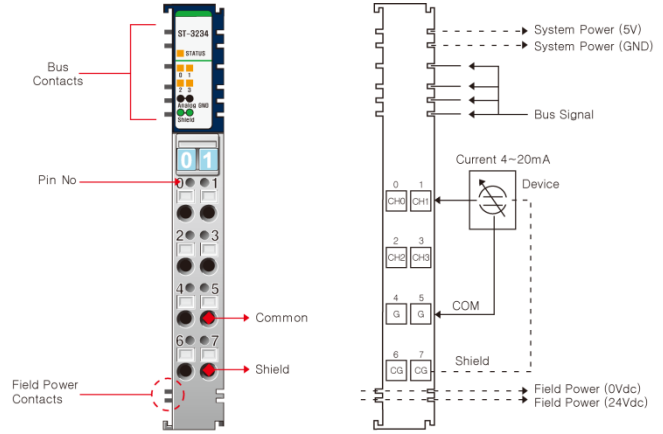
ST-3214 : 4 channels Current 4~20mA 12bit



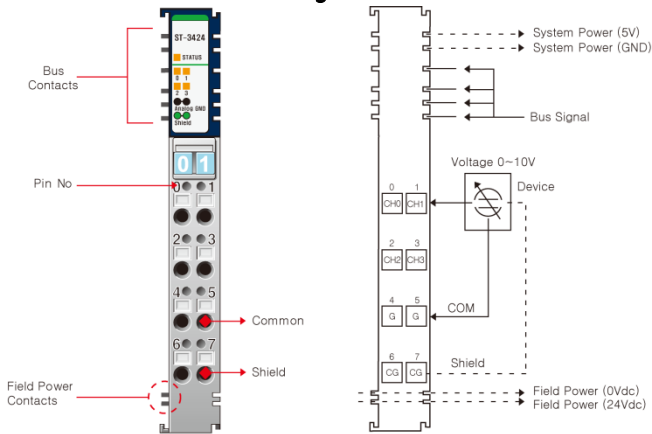
ST-3134 : 4 channels Current 0~20mA 14bit



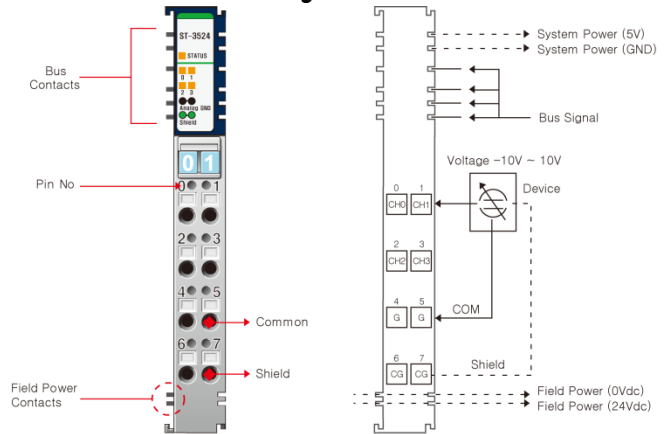
ST-3234 : 4 channels Current 4~20mA 14bit



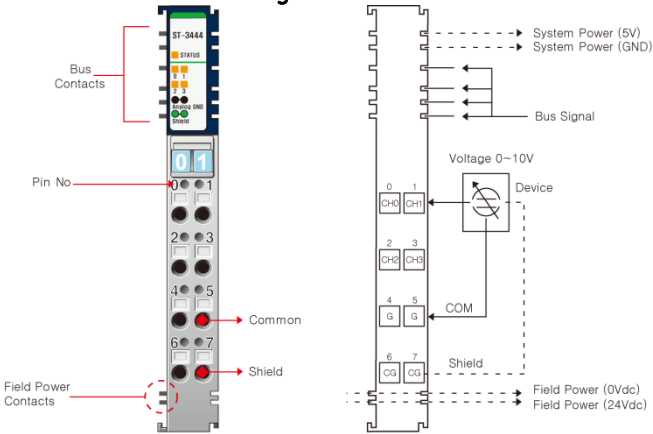
ST-3424 : 4 channels Voltage 0~10V 12bit



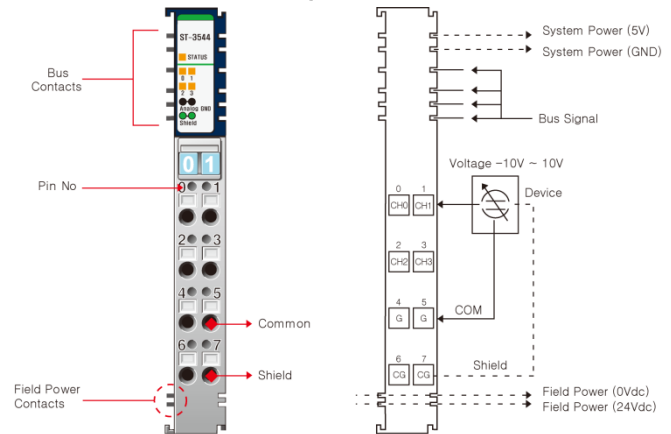
ST-3524 : 4 channels Voltage -10~10V 12bit



ST-3444 : 4 channels Voltage 0~10V 14bit

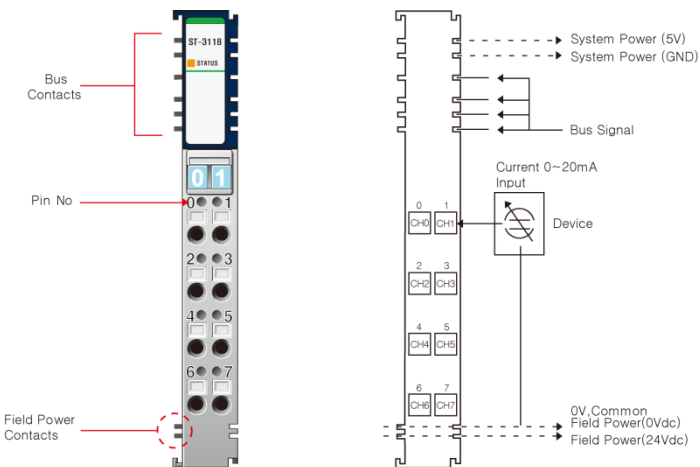


ST-3544 : 4 channels Voltage -10~10V 14bit

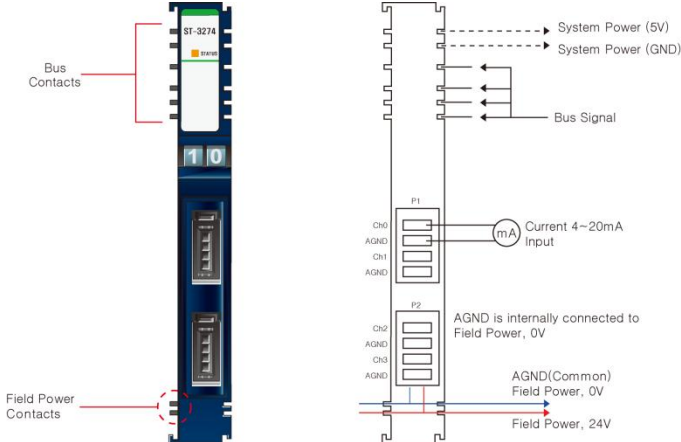


4. Input wiring Diagrams

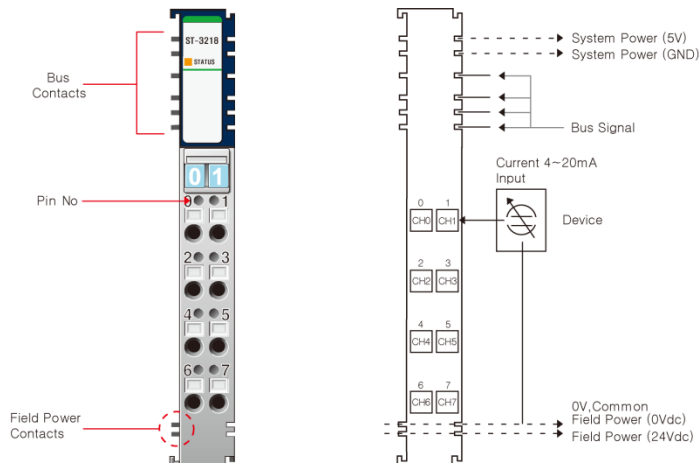
ST-3118 : 8 channels Current 0~20mA 12bit



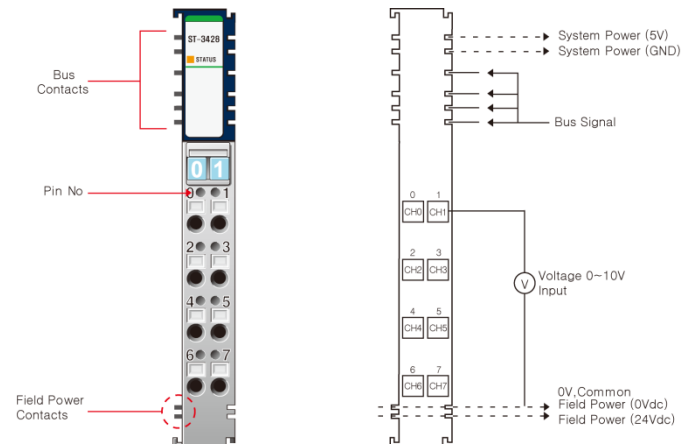
ST-3274 : 4 channels Current Sensor Connector 4~20mA, 12bit



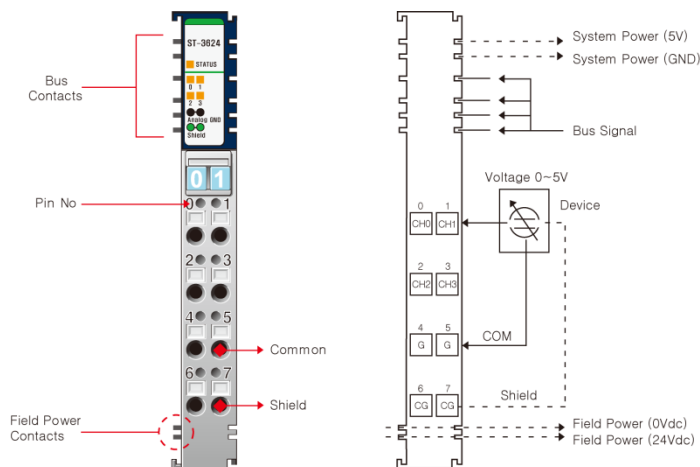
ST-3218 : 8 channels Current 4~20mA 12bit



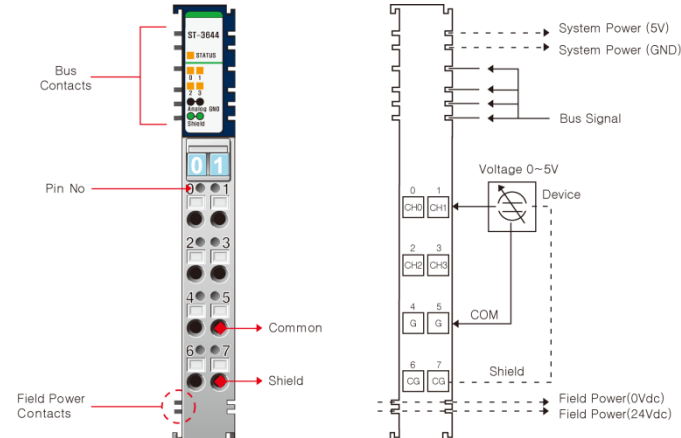
ST-3428 : 8 channels Voltage 0~10V 12bit



ST-3624 : 4 channels Voltage 0V~5V 12bit

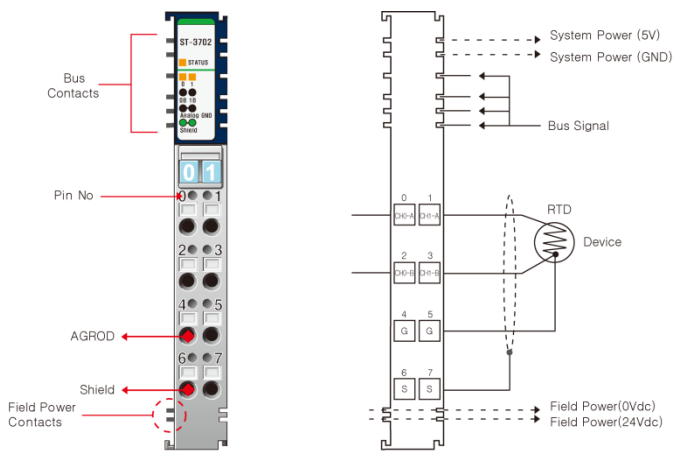


ST-3644 : 4 channels Voltage 0V~5V 14bit

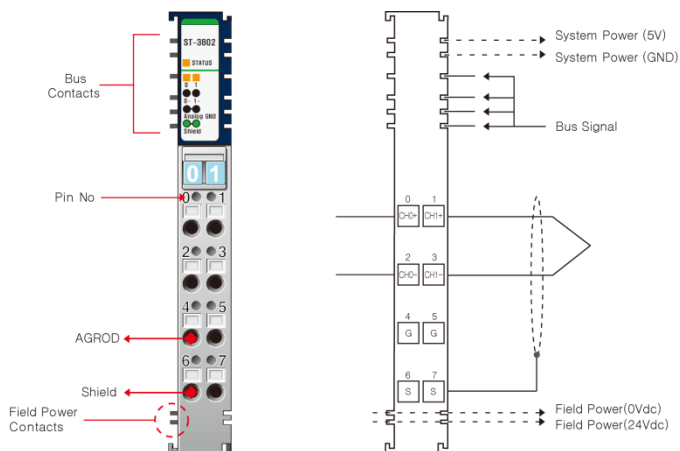


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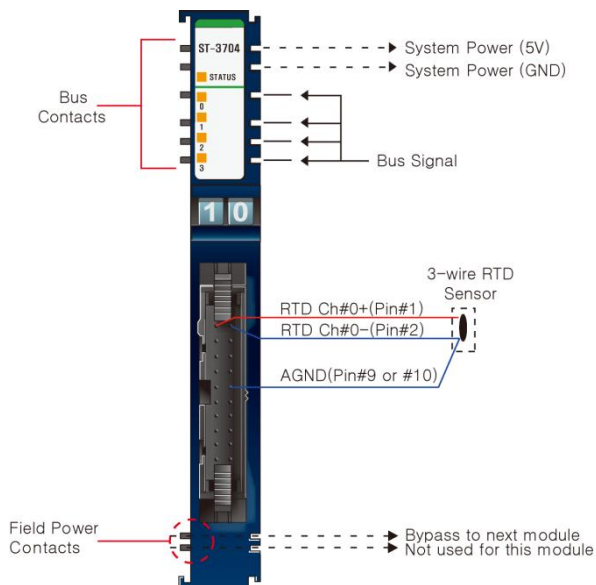
ST-3702 : 2 channels RTD / Resistance



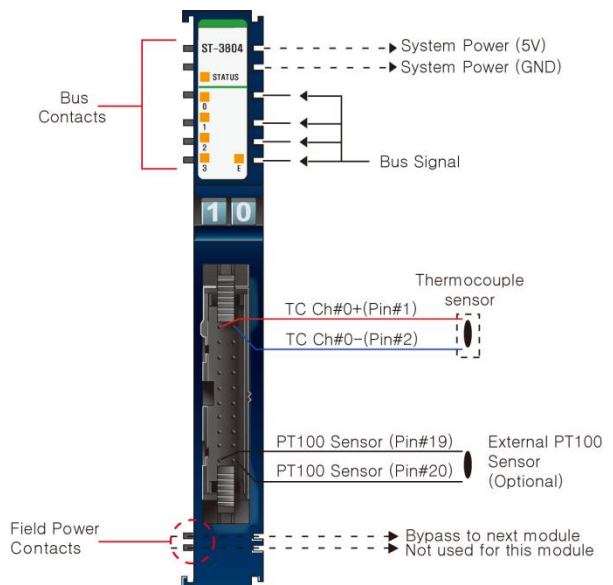
ST-3802 : 2 channels TC / mV



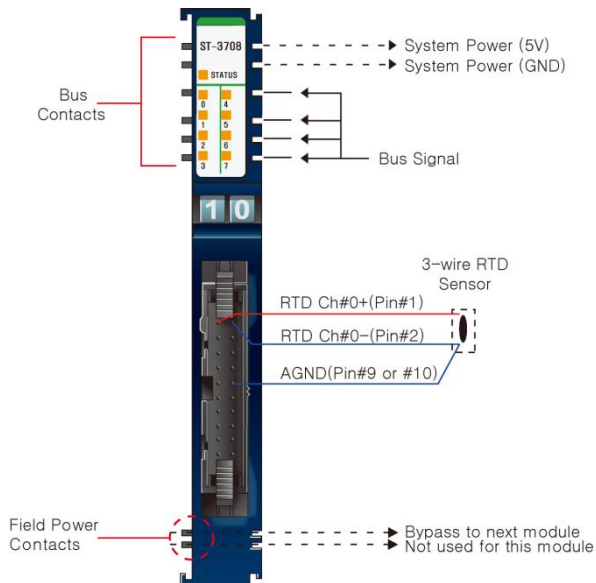
ST-3704 : 4 channels RTD / Resistance



ST-3804 : 4 channels TC / mV



ST-3708 : 8 channels RTD / Resistance



ST-3808 : 8 channels TC / mV

