



## Analog Input Modules

GE provides a range of RSTi-EP analog input modules with 4 or 8 inputs and up to 16-bit resolution. The measurement range is defined by parameterization with an accuracy of 0.1% FSR with the exception of EP3124, which 0.25% FSR. The parameters for the measurement range can be individually set for each channel.

	<b>EP-3124</b>	<b>EP-3164</b>	<b>EP-3264</b>	<b>EP-3368</b>	<b>EP-3468</b>
<b>Product Name</b>	Analog Input, 4 Channels Voltage/Current 12 Bits 2, 3, or 4 Wire	Analog Input, 4 Channels Voltage/Current 16 Bits 2, 3, or 4 Wire	Analog Input, 4 Channels Voltage/Current 16 Bits with Diagnostics 2, 3, or 4 Wire	Analog Input, 8 Channels Current 16 Bits 2, 3, or 4 Wire	Analog Input, 8 Channels Current 16 Bits 2, 3, or 4 Wire, Channel Diagnostic
<b>Lifecycle Status</b>	Active	Active	Active	Active	Active
<b>Module Type</b>	Analog Input	Analog Input	Analog Input	Analog Input	Analog Input
<b>System Bus Transfer Rate</b>	48 Mbps	48 Mbps	48 Mbps	48 Mbps	48 Mbps
<b>Potential Isolation</b>	Test voltage: max. 28.8 V within one channel, 500 V DC field/system Pollution severity level: 2 Overvoltage category: II	Test voltage: max. 28.8 V within one channel, 500 V DC field/system Pollution severity level: 2 Overvoltage category: II	Test voltage: max. 28.8 V within one channel, 500 V DC field/system Pollution severity level: 2 Overvoltage category: II	Test voltage: max. 28.8 V within one channel, 500 V DC field/system Pollution severity level: 2 Overvoltage category: II	Test voltage: max. 28.8 V within one channel, 500 V DC field/system Pollution severity level: 2 Overvoltage category: II
<b>Common Mode Voltage</b>	Against: 0V - ±50V Channel-Channel: ±3V	Against: 0V - ±50V Channel-Channel: ±3V	Against: 0V - ±50V Channel-Channel: ±3V	Against: 0V - ±50V Channel-Channel: ±3V	Against: 0V - ±50V Channel-Channel: ±3V
<b>Number of Inputs</b>	4	4	4	8	8
<b>Input Values</b>	Voltage (0 to 5 V, ±5 V, 0 to 10 V, ±10 V, 1 to 5 V, 2 to 10 V) Current (0 to 20 mA, 4 to 20 mA)	Voltage (0 to 5 V, ±5 V, 0 to 10 V, ±10 V, 1 to 5 V, 2 to 10 V) Current (0 to 20 mA, 4 to 20 mA)	Voltage (0 to 5 V, ±5 V, 0 to 10 V, ±10 V, 1 to 5 V, 2 to 10 V) Current (0 to 20 mA, 4 to 20 mA)	Current input (0 to 20 mA, 4 to 20 mA)	Current input (0 to 20 mA, 4 to 20 mA)
<b>Resolution</b>	12 bits	16 bits	16 bits	16 bits	16 bits
<b>Frequency Suppression</b>	Options: disabled (0) / 50 Hz (1) / 60 Hz (2) / Average over 16 values (3) Default: disabled	Options: disabled (0) / 50 Hz (1) / 60 Hz (2) / Average over 16 values (3) Default: disabled	Options: disabled (0) / 50 Hz (1) / 60 Hz (2) / Average over 16 values (3) Default: disabled	Options: disabled (0) / 50 Hz (1) / 60 Hz (2) / Average over 16 values (3) Default: disabled	Options: disabled (0) / 50 Hz (1) / 60 Hz (2) / Average over 16 values (3) Default: disabled
<b>Accuracy</b>	0.25 % max. at 25 °C (77 °F) 50 ppm/K max. Temperature coefficient max. -10 mV/A additional inaccuracy in the voltage mode due to sensor power supply current	0.1 % max. at 25 °C (77 °F) 50 ppm/K max. Temperature coefficient max. -10 mV/A additional inaccuracy in the voltage mode due to sensor power supply current	0.1 % max. at 25 °C (77 °F) 50 ppm/K max. Temperature coefficient max. -10 mV/A additional inaccuracy in the voltage mode due to sensor power supply current	0.1 % max. at 25 °C (77 °F) 50 ppm/K max. Temperature coefficient max. -10 mV/A additional inaccuracy in the voltage mode due to sensor power supply current	0.1 % max. at 25 °C (77 °F) 50 ppm/K max. Temperature coefficient max. -10 mV/A additional inaccuracy in the voltage mode due to sensor power supply current
<b>Sensor Supply</b>	max. 2 A per plug, total max. 8 A	max. 2 A per plug, total max. 8 A	max. 0.5 A per plug	max. 125 mA per channel; channel 0 to 3 and 4 to 7 respectively are fused in combination	max. 125 mA per channel; channel 0 to 3 and 4 to 7 respectively are fused in combination
<b>Sensor Connection</b>	2-wire, 3-wire, 3-wire + FE	2-wire, 3-wire, 3-wire + FE	2-wire, 3-wire, 3-wire + FE	2-wire, 3-wire, 3-wire + FE	2-wire, 3-wire, 3-wire + FE
<b>Conversion time</b>	1 ms	1 ms	1 ms	1 ms	1 ms
<b>Reverse Polarity Protection</b>	Yes	Yes	Yes	Yes	Yes
<b>Short-Circuit Proof</b>	Yes	Yes	Yes	Yes	Yes
<b>Response Time of Protective Circuit</b>	< 0.1 s with short-circuit to +24 V	< 50 ms	< 50 ms	< 0.1 s with short-circuit to +24 V	< 0.1 s with short-circuit to +24 V
<b>Reset Time</b>	N/A	N/A	N/A	Temperature-dependent (< 30 s at 20°C)	Temperature-dependent (< 30 s at 20°C)
<b>Module Diagnostics</b>	Yes	Yes	Yes	Yes	Yes
<b>Individual Channel Diagnostics</b>	No	No	Yes	No	Yes
<b>Supply Voltage</b>	20.4V – 28.8V via system bus	20.4V – 28.8V via system bus	20.4V – 28.8V via system bus	20.4V – 28.8V via system bus	20.4V – 28.8V via system bus
<b>Current consumption from system current path <math>I_{SYS}</math></b>	8 mA	8 mA	8 mA	8 mA	8 mA
<b>Current consumption from input current path <math>I_{IN}</math></b>	25 mA + sensor supply current	25 mA + sensor supply current	25 mA + sensor supply current	20 mA + load	20 mA + load
<b>Operating Temperature</b>	-20°C to +60°C (-4 °F to +140 °F)	-20°C to +60°C (-4 °F to +140 °F)	-20°C to +60°C (-4 °F to +140 °F)	-20°C to +60°C (-4 °F to +140 °F)	-20°C to +60°C (-4 °F to +140 °F)
<b>Storage Temperature</b>	-40°C to +85°C (-40 °F to +185 °F)	-40°C to +85°C (-40 °F to +185 °F)	-40°C to +85°C (-40 °F to +185 °F)	-40°C to +85°C (-40 °F to +185 °F)	-40°C to +85°C (-40 °F to +185 °F)
<b>Humidity</b>	5% to 95%, noncondensing	5% to 95%, noncondensing	5% to 95%, noncondensing	5% to 95%, noncondensing	5% to 95%, noncondensing
<b>Dimensions (H x W x D) in (mm)</b>	4.72 x 0.45 x 2.99 (120 x 11.5 x 76)	4.72 x 0.45 x 2.99 (120 x 11.5 x 76)	4.72 x 0.45 x 2.99 (120 x 11.5 x 76)	4.72 x 0.45 x 2.99 (120 x 11.5 x 76)	4.72 x 0.45 x 2.99 (120 x 11.5 x 76)
<b>Weight oz (g)</b>	3.07 (87)	3.14 (89)	3.14 (89)	3.17 (90)	3.17 (90)