

SPECIFICATIONS

MT PXIe-X605

32 RTD, 15 Bit, 50S/s, PT100

This document contains the specifications for MT PXIe-X605. Specifications are typical at 25°C unless otherwise noted.

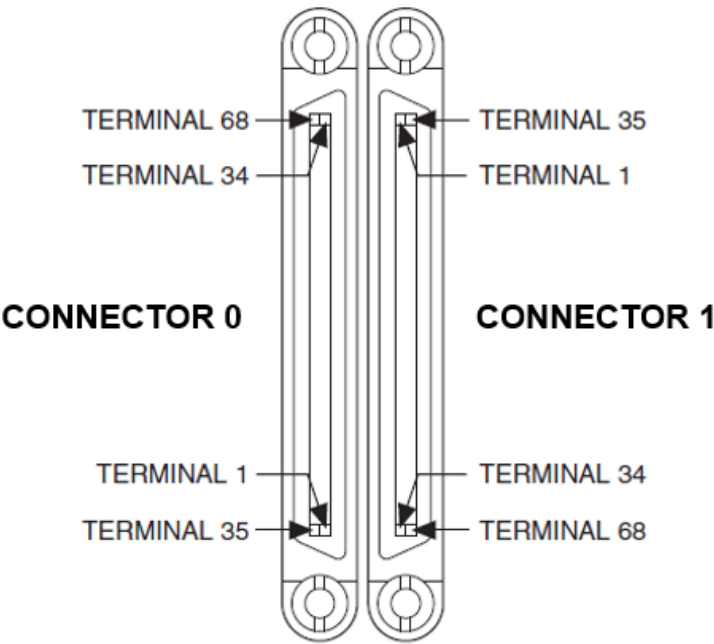


Caution Using the MT PXIe-X605 in a manner not described in this document may impair the protection the MT PXIe-X605 provides.

Input Characteristics

Number of channels	32 analog input channels
ADC resolution	15 bits
Type of ADC	Delta-Sigma
Measurement temperature rage	-200°C to +850°C
Total Accuracy	0.5°C (0.05% of Full Scale)
Common-Mode Rejection	90 dB
50/60 Hz Noise Rejection	82 dB
Input protection	±45V
Input noise	150 uV RMS

Pinouts



CONNECTOR 0

RTD0+	68	34	RTD0-
EX0+	67	33	EX0-
RTD1+	66	32	RTD1-
EX1+	65	31	EX1-
RTD2+	64	30	RTD2-
EX2+	63	29	EX2-
RTD3+	62	28	RTD3-
EX3+	61	27	EX3-
RTD4+	60	26	RTD4-
EX4+	59	25	EX4-
RTD5+	58	24	RTD5-
EX5+	57	23	EX5-
RTD6+	56	22	RTD6-
EX6+	55	21	EX6-
RTD7+	54	20	RTD7-
EX7+	53	19	EX7-
RTD8+	52	18	RTD8-
EX8+	51	17	EX8-
RTD9+	50	16	RTD9-
EX9+	49	15	EX9-
RTD10+	48	14	RTD10-
EX10+	47	13	EX10-
RTD11+	46	12	RTD11-
EX11+	45	11	EX11-
RTD12+	44	10	RTD12-
EX12+	43	9	EX12-
RTD13+	42	8	RTD13-
EX13+	41	7	EX13-
RTD14+	40	6	RTD14-
EX14+	39	5	EX14-
RTD15+	38	4	RTD15-
EX15+	37	3	EX15-
NC	36	2	NC
COM	35	1	COM

CONNECTOR 1

RTD16+	68	34	RTD16-
EX16+	67	33	EX16-
RTD17+	66	32	RTD17-
EX17+	65	31	EX17-
RTD18+	64	30	RTD18-
EX18+	63	29	EX18-
RTD19+	62	28	RTD19-
EX19+	61	27	EX19-
RTD20+	60	26	RTD20-
EX20+	59	25	EX20-
RTD21+	58	24	RTD21-
EX21+	57	23	EX21-
RTD22+	56	22	RTD22-
EX22+	55	21	EX22-
RTD23+	54	20	RTD23-
EX23+	53	19	EX23-
RTD24+	52	18	RTD24-
EX24+	51	17	EX24-
RTD25+	50	16	RTD25-
EX25+	49	15	EX25-
RTD26+	48	14	RTD26-
EX26+	47	13	EX26-
RTD27+	46	12	RTD27-
EX27+	45	11	EX27-
RTD28+	44	10	RTD28-
EX28+	43	9	EX28-
RTD29+	42	8	RTD29-
EX29+	41	7	EX29-
RTD30+	40	6	RTD30-
EX30+	39	5	EX30-
RTD31+	38	4	RTD31-
EX31+	37	3	EX31-
NC	36	2	NC
COM	35	1	COM

Power Requirements

Power consumption from chassis	517 mW maximum
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Thermal dissipation (at 70 °C)	1480mW maximum
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Maximum Power Requirements

Power requirements are dependent on the digital output loads and configuration of the LabVIEW FPGA VI used in your application.

+3.3 V	3 A
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+12 V	2 A
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Safety Voltages

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA C22.2 No. 61010-1

CE Compliance

This product meets the essential requirements of applicable European Directives, as follows:

- 2014/35/EU; Low-Voltage Directive (safety)
- 2014/30/EU; Electromagnetic Compatibility Directive (EMC)
- 2014/34/EU; Potentially Explosive Atmospheres (ATEX)

Shock and Vibration

To meet these specifications, you must panel mount the system.

Operating vibration

Random (IEC 60068-2-64)	5 g _{rms} , 10 Hz to 500 Hz
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Sinusoidal (IEC 60068-2-6)	5 g, 10 Hz to 500 Hz
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Operating shock (IEC 60068-2-27)	30 g, 11 ms half sine; 50 g, 3 ms half sine; 18 shocks at 6 orientations
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Environmental

Refer to the manual for the chassis you are using for more information about meeting these specifications.

Operating temperature (IEC 60068-2-1, IEC 60068-2-2)	-40 °C to 70 °C
Storage temperature (IEC 60068-2-1, IEC 60068-2-2)	-40 °C to 85 °C
Ingress protection	IP40
Operating humidity (IEC 60068-2-78)	10% RH to 90% RH, noncondensing Storage
humidity (IEC 60068-2-78)	5% RH to 95% RH, noncondensing Pollution
Degree	2
Maximum altitude	4,000 m

Indoor use only.