

# Product data sheet

Specifications



## analog input module Modicon Premium - 16 I multirange

TSXAEY1600

! Discontinued on: 31 December 2018

! To be end-of-service on: 31 December 2026

! Discontinued - Service only

### Main

Range of product	Modicon Premium Automation platform
Product or component type	Analog input module
Input level	High level
Analogue input number	16
Analogue input type	Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V
Analog/Digital conversion	12 bits

### Complementary

Nominal read cycle time	51 ms
Fast read cycle time	3 ms + 3 ms x number of channels used
Measurement error	0.1 % of full scale +/- 10 V 25 °C 0.1 % of full scale 0...10 V 25 °C 0.1 % of full scale 0...5 V 25 °C 0.1 % of full scale 1...5 V 25 °C 0.13 % of full scale +/- 10 V 0...60 °C 0.13 % of full scale 0...10 V 0...60 °C 0.13 % of full scale 0...5 V 0...60 °C 0.13 % of full scale 1...5 V 0...60 °C 0.16 % of full scale 0...20 mA 25 °C 0.16 % of full scale 4...20 mA 25 °C 0.32 % of full scale 0...20 mA 0...60 °C 0.32 % of full scale 4...20 mA 0...60 °C
Isolation between channels and bus	1000 Vrms
Isolation between channels and ground	1000 Vrms
Isolation between channels	Common point
Common mode between channels	None
Input overvoltage protection	-15...15 V at state 0 250 kOhm -30...30 V at state 1 250 kOhm
Electrical connection	2 connectors SUB-D 25
Overcurrent	-30...30 mA at state 1 250 kOhm
Marking	CE

<b>Current consumption</b>	270 mA at 5 V DC
<b>Module format</b>	Standard
<b>Net weight</b>	0.34 kg

## Environment

<b>Standards</b>	IEC 1131
<b>Product certifications</b>	BV GL LR DNV RINA ABS RMRS
<b>Ambient air temperature for operation</b>	0...60 °C
<b>Ambient air temperature for storage</b>	-25...70 °C
<b>Relative humidity</b>	10...95 % without condensation for operation 5...95 % without condensation for storage
<b>Operating altitude</b>	0...2000 m
<b>Protective treatment</b>	TC
<b>IP degree of protection</b>	IP20
<b>Pollution degree</b>	2

## Packing Units

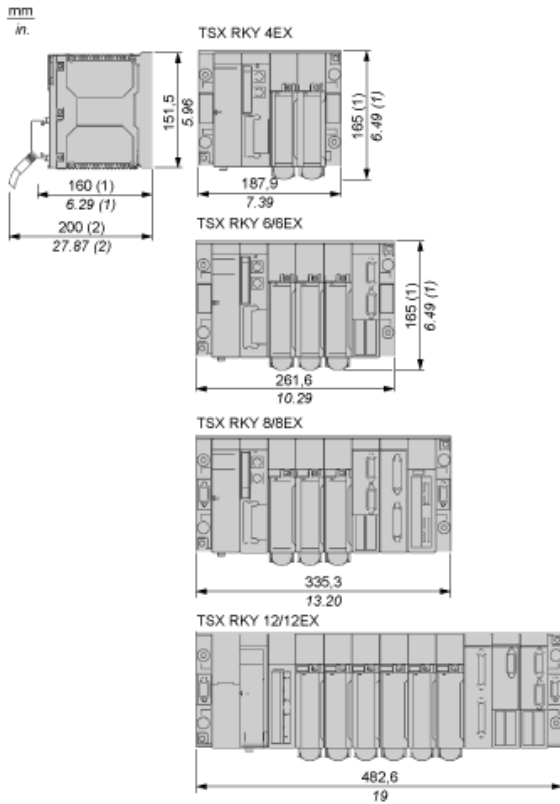
<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.5 cm
<b>Package 1 Width</b>	18.0 cm
<b>Package 1 Length</b>	26.0 cm
<b>Package 1 Weight</b>	447.0 g
<b>Unit Type of Package 2</b>	S04
<b>Number of Units in Package 2</b>	12
<b>Package 2 Height</b>	30.0 cm
<b>Package 2 Width</b>	40.0 cm
<b>Package 2 Length</b>	60.0 cm
<b>Package 2 Weight</b>	6.311 kg

## Contractual warranty

<b>Warranty</b>	18 months
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**Standard and Extendable Racks for Modules Mounting**

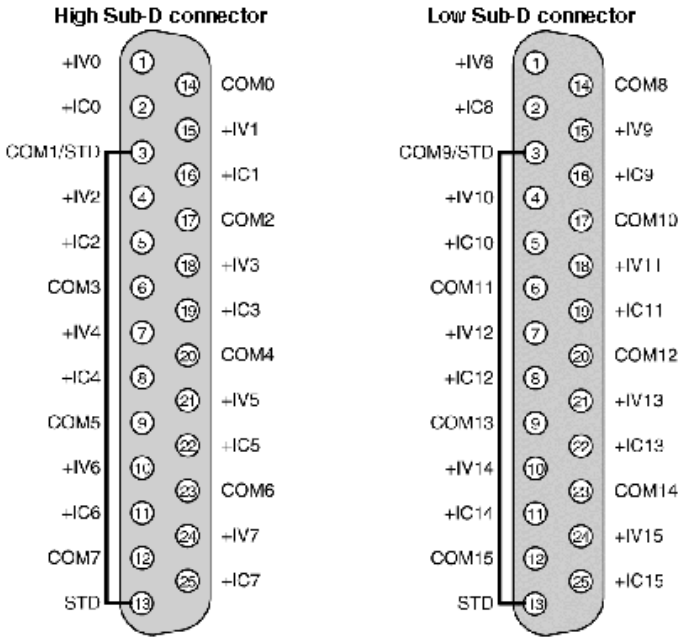
**Dimensions of Modules and Racks**



- (1) With screw terminal block modules.
- (2) Maximum depth for all types of modules and their associated connectors.

**Analog Input Module (16-Channel, Voltage/Current)**

**Connector Pin Assignment**



- +IVx** + Pole voltage input of channel x
- +ICx** + Pole current input of channel x
- COMx** - Pole current or voltage input of channel x
- STD** The "strap" between pins 3 and 13 detects the unplugging of the connector.

NOTE: The COMx pins are linked internally in the module.

**Recommended replacement(s)**

TSXAEY1600 is replaced by:

1x



isolated analog input module X80 - 8 inputs - high speed  
BMXAMI0810