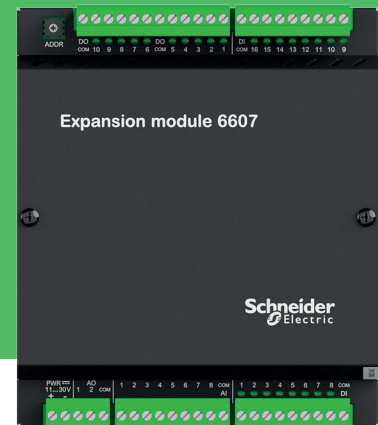


# 6607

## I/O expansion module for SCADAPack x70 Smart RTUs



### Product at a glance

The 6607 I/O Expansion module increases the I/O capacity for SCADAPack™ x70 Smart RTUs (Remote Terminal Units) by providing additional digital, analog and counter points in a compact form-factor.

Expandable: Up to four 6607 modules may be connected to a SCADAPack x70 Smart RTU for enhanced I/O flexibility.

Configurable:

- Locally or remotely using the SCADAPack RemoteConnect configuration software on a desktop or laptop computer connected to the SCADAPack through the USB Device port or through any of the available serial or Ethernet ports.
- Remotely as part of an end-to-end SCADA system using EcoStruxure™ Geo SCADA Expert software.

Available I/O:

- 16 digital inputs
- 8 counter inputs (shared with DIs)
- 10 digital outputs
- 8 analog inputs
- 2 analog outputs

Conformal-coated circuit boards for enhanced reliability in adverse environments.

Wide operating temperature range:  
-40...70 °C (-40...158 °F).

Class I, Div. 2 hazardous area certifications included.

Green Premium™ ecolabel  
product – Sustainable  
performance, by design

# 6607

## I/O expansion module for SCADAPack x70 Smart RTUs

### Specifications – cont'd


#### General

Environment	<ul style="list-style-type: none"> <li>-40...70 °C (-40...158 °F) operating temperature when the unit is mounted horizontally on a vertical surface</li> <li>-40...65 °C (-40...149 °F) operating temperature when the unit is mounted in any other position</li> <li>-40...85 °C (-40...185 °F) storage temperature</li> <li>5...95% relative humidity, non-condensing</li> <li>Pollution Degree 2, Installation Category I, Indoor use</li> </ul>
Elevation	3,000 m (9,842 ft)
Terminations	3.3...0.05 mm <sup>2</sup> (12...30 AWG), solid or stranded
Dimensions	<ul style="list-style-type: none"> <li>142 mm (5.6 in) wide</li> <li>166 mm (6.5 in) high</li> <li>46 mm (1.8 in) deep</li> </ul>
Packaging	<ul style="list-style-type: none"> <li>Corrosion-resistant; zinc-plated steel base and stainless steel cover with black enamel paint</li> <li>G3 conformal-coated circuit boards</li> </ul>
Mechanical shock	<ul style="list-style-type: none"> <li>IEC 61131-2</li> <li>½ sine, 15 ms, 15 g</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>IEC 61131-2</li> <li>5...8.4 Hz: Amplitude-controlled, 7.0 mm (0.28 in) peak-to-peak</li> <li>8.4...150 Hz: Acceleration controlled, 1.0 g peak</li> </ul>

#### Power Supply

Input Voltage	<ul style="list-style-type: none"> <li>Rated Voltage 14...29 Vdc</li> <li>Turn-on 10...11.5 Vdc</li> <li>Turn-off 9...10 Vdc</li> </ul>
Power requirements from the SCADAPack	1.2 W

#### Certifications

Industrial standards	<p>Requirements specific to the SCADAPack functional characteristics, immunity, robustness, and safety:</p> <ul style="list-style-type: none"> <li>IEC/EN 61131-2</li> <li>CSA 22.2 No. 61010-1-12 and CSA 22.2 No. 61010-2-201</li> <li>UL 61010-1 and UL 61010-2-201</li> </ul>
CE marking compliance	<ul style="list-style-type: none"> <li>For the latest information regarding product compliance with European Directives for CE marking, refer to the EU Declaration of Conformity issued for your product at <a href="https://se.com">se.com</a></li> <li>For the latest information regarding product environmental compliance visit the Schneider Electric Check a Product portal at <a href="https://checkaproduct.se.com/">https://checkaproduct.se.com/</a></li> </ul>
Installation in classified Ex area	<ul style="list-style-type: none"> <li>North America: Hazardous locations Class I, Division 2, groups A, B, C, and D, T4 and Class I, Zone 2, T4, -40 °C ≤ Tamb ≤ 70 °C (-40 °F ≤ Tamb ≤ 158 °F) and Class I, Zone 2, IIC T4 according to CSA C22.2 No. 213-17, UL 12.12.01</li> <li>ATEX, UKEX: Zone 2, II 3G, Ex ec nC IIC T4 Gc according to EN IEC 60079- 0, EN IEC 60079-7 and EN IEC 60079-15</li> <li>IECEX: Zone 2, Ex ec nC IIC T4 Gc according to IEC 60079- 0, IEC 60079-7 and IEC 60079-15</li> <li>For Eurasian Economic Union: EAC </li> </ul>
Specific countries	<ul style="list-style-type: none"> <li>For Australia and New Zealand: ACMA requirements for RCM marking</li> <li>For United States: FCC Part 15 Subpart B Class A</li> </ul>

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## I/O expansion module for SCADAPack x70 Smart RTUs

### Specifications – cont'd

#### Communications

I/O bus	SCADAPack 470, 570, 574 and 575 Maximum number of 6607 input output modules in the system is 4
	SCADAPack 474 Maximum number of 6607 input output modules in the system is 3

#### Digital Inputs

Quantity	16
Connectors	2 removable, 9-pin
Indicators	16 LEDs
Voltage	12 Vdc or 24 Vdc (Typical)
Over-voltage tolerance	<ul style="list-style-type: none"> <li>• 36 Vdc</li> <li>• 150% sustained over-voltage without foreseeable damage</li> </ul>
Input current	<ul style="list-style-type: none"> <li>• 1.2 mA typical at 12 Vdc</li> <li>• 2.4 mA typical at 24 Vdc</li> </ul>
Input logic-HI level	OFF to ON transition threshold is typically 6.5 Vdc
Timestamping	10 ms Sequence of Event (SOE)
Status	Chatter filter detection when digital state changes faster than 5 Hz
Isolation	<ul style="list-style-type: none"> <li>• Isolation is in 2 groups of 8</li> <li>• Isolation from logic supply and chassis: 250 Vac/350 Vdc</li> </ul>

#### Counter Inputs

Quantity	8
Electrical characteristics	Shared with digital input channels
Reporting	<ul style="list-style-type: none"> <li>• 32-bit counters</li> <li>• Deviation</li> <li>• Timestamped events</li> <li>• Unsolicited reporting</li> </ul>
DI1, DI2, DI3, and DI4-supported counting	<ul style="list-style-type: none"> <li>• Range: 0 to 1.5 kHz</li> <li>• Rising edge counting</li> <li>• Falling edge counting (using digital input state inversion)</li> </ul>
DI5, DI6, DI7, and DI8-supported counting	<ul style="list-style-type: none"> <li>• Range: 0 to 500 Hz</li> <li>• Rising edge counting</li> <li>• Falling edge counting (using digital input state inversion)</li> </ul>

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## I/O expansion module for SCADAPack x70 Smart RTUs

### Specifications – cont'd

#### Digital Outputs

Quantity	10
Connector	Removable, 12-pin
Type	<ul style="list-style-type: none"> <li>Form A Contacts (normally open)</li> <li>5 contacts share one common</li> </ul>
Indicators	Logic-powered LEDs
Inductive loads	<ul style="list-style-type: none"> <li>To suppress the noise in AC and DC circuits and help extend the life of the relay contacts, place a metal oxide varistor (for AC circuits) or a diode (for DC circuits) across the coil.</li> <li>See Digital Output Wiring Example for further information</li> </ul>
Isolation	<ul style="list-style-type: none"> <li>Isolation is in 2 groups of 5</li> <li>250 VAC / 350 VDC maximum to SCADAPack logic and chassis</li> </ul>

#### Dry Contact Relay Version

Contact rating	<ul style="list-style-type: none"> <li>2 A, 30 VDC</li> <li>10 A maximum per common</li> </ul>
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#### Analog Inputs

Quantity	8
Connector	Removable, 9-pin
Ranges	Software-configurable <ul style="list-style-type: none"> <li>0...20 mA</li> <li>4...20 mA</li> <li>0...5 Vdc</li> <li>1...5 Vdc</li> </ul>
Resolution (100 ms sampling)	<ul style="list-style-type: none"> <li>24-bit conversion</li> <li>0.25 mV resolution on 5 Vdc range</li> <li>1 µA resolution on 20 mA range</li> </ul>
Accuracy	<ul style="list-style-type: none"> <li>±0.1% of full scale at 25 °C (77 °F)</li> <li>±0.2% over temperature range</li> </ul>
Input resistance	<ul style="list-style-type: none"> <li>250 ohms in current configurations</li> <li>1 Mohms in voltage configurations</li> </ul>
Isolation	250 Vac / 350 Vdc maximum to SCADAPack logic and chassis
Cable length	Maximum: 30 m (98.4 ft)

#### Analog Outputs

Quantity	2
Connector	Removable, 5-pin
Range	<ul style="list-style-type: none"> <li>0...20 mA sourcing</li> <li>4...20 mA sourcing</li> </ul>
Reporting	Open Loop Detection (for 0...20 mA configuration, open loop detection operates above 0.1% of full span. i.e. above 0.02 mA)
Resolution	12-bit (5.9 uA)
Load range	<ul style="list-style-type: none"> <li>12 Vdc: 0...400 ohms</li> <li>24 Vdc: 0...1000 ohms</li> <li>30 Vdc: 250...1300 ohms</li> </ul>

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## I/O expansion module for SCADAPack x70 Smart RTUs

### Specifications – cont'd

#### Analog Outputs (cont'd)

Accuracy	<ul style="list-style-type: none"> <li>• <math>\pm 0.15\%</math> of full scale at 25 °C (77 °F)</li> <li>• <math>\pm 0.35\%</math> of full scale over temperature range</li> </ul>
Noise and ripple	0.04% maximum
Logic end-of-scan to signal update latency	With up to 10, 5000 series I/O modules Typical: 18...27 ms
Response time (DAC to signal)	Less than 100 $\mu$ s for 10% to 90% signal change
Isolation	Optional isolation from logic supply by using external power supply
Cable Length	Maximum: 30 m (98.4 ft)
Load range	<ul style="list-style-type: none"> <li>• 12 Vdc: 0...400 ohms</li> <li>• 24 Vdc: 0...1000 ohms</li> <li>• 30 Vdc: 250...1300 ohms</li> </ul>

### Model Code

Code	Select: Model
TBUX297592S	Combination I/O module, 16, DI, 8 CI, 10 DO, 8 AI, 2 AO

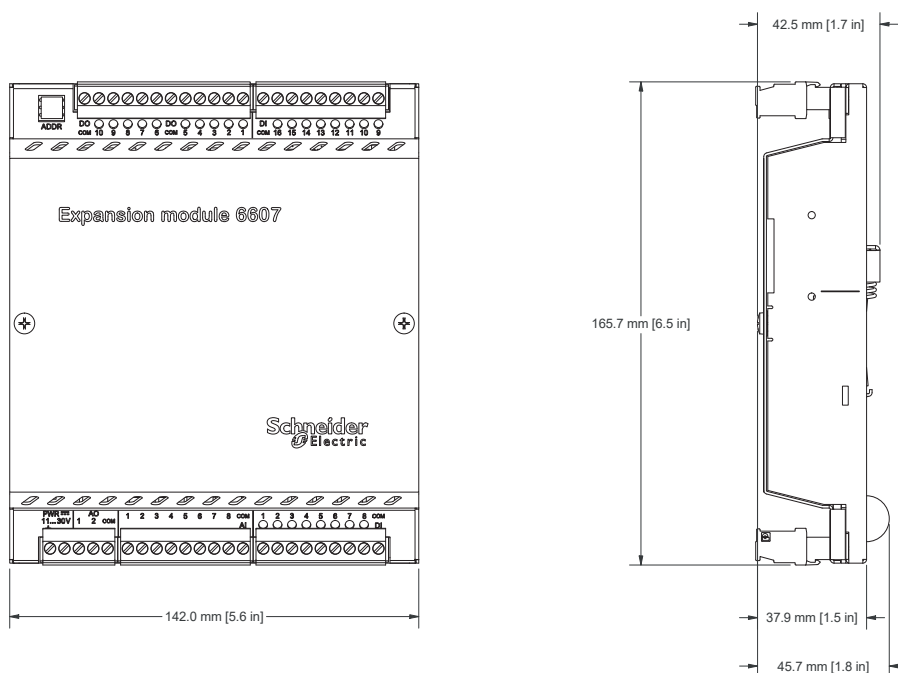
### Accessories

Part Number	Description
TBUM297310	SCADAPack 47x Connector Kit - five complete sets of spare connectors for SCADAPack 470 and 474 RTUs, and 6607 I/O expansion module

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## I/O expansion module for SCADAPack x70 Smart RTUs

### Dimensions - 6607



**Note:** Accessories sold separately.

**Disclaimer:**

The information provided in this document contains general descriptions and/or technical characteristics of the performance of the described products or services. For detailed specification, performance and instruction of use, refer to corresponding Catalogs and user guides if available.

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\*PEP: Product Environmental Profile (i.e. Environmental Product Declaration)