



# SMP 16/SG Intelligent Substation Gateway

## As Powerful as it Gets

The **SMP 16/SG Gateway** is the most advanced and flexible solution in the SMP Gateway family. It is expandable, supports redundancy, features advanced automation functions and delivers strong security features—all in the same box.

- Up to 48 serial ports
- Optional built-in GPS clock
- Optional 16 port optical and/or metallic Ethernet switch card
- Creates a NERC-compliant electronic perimeter
- Sets the foundation for enterprise-wide access to substation data

Cybetec SMP Gateways bridge the gap between substations and the people who maintain, engineer and plan the future of the enterprise.

- Extract and concentrate data from any device, regardless of protocol
- Send data to SCADA, control centers and enterprise applications
- Automate data processing and device control
- Passthrough to any device

### Upgrade your substations, not your RTUs

- Integrate existing / legacy RTUs, IEDs, PLCs, and multiple control centers
- Universal ports let you connect any serial device to any serial port

### Automate! Add intelligent controls to your substation equipment

- Create sophisticated automation scripts such as automatic load and feeder management
- Extend the capabilities of legacy devices with high-level functions such as grouped controls

### Strengthen cyber-security

- Built-in advanced security features
- Protect data flows with the built-in firewall and VPN server

### All-in-one tough box

- Meets all IEEE and IEC requirements for substation-grade equipment
- Up to 128 devices, 64 control centers and 10 000 data points per system

### Provide a single point of access

- Create a homogenous system with a single entry point for each substation
- Install cascading SMP Gateways and multiply the number of connected devices
- Extract non-operational data for planning, maintenance, engineering, and fault analysis

### You can depend on it

- SMP Gateways are rugged, reliable and tailored to our client's needs
- Thousands of installed systems worldwide
- Includes user-friendly configuration tools



# SMP 16/SG Technical Specifications

## General Features

Data concentration  
 Protocol translation  
 NERC CIP-compliant security  
 Hardware and software redundancy  
 Built-in web server  
 Automation functions  
 Passthrough connections  
 Dialup connections  
 IEC-61131 compatible Soft-PLC  
 Windows®-based configuration and maintenance tools  
 Built-in self-diagnostics  
 Real-time clock with battery backup  
 Built-in watchdog timer  
 Power supply monitoring  
 Flexible Licensing

## Standards Compliance

Protective Relay Standards  
 IEEE C37.90  
 IEC 60255  
 EMI Immunity Type Tests and Specifications  
 IEC-61850-3  
 IEEE-1613  
 Telephone Terminal Equipment  
 TIA-968-A  
 CS-03  
 CE Marking for Low Voltage Electrical Equipment  
 Unit test list available upon request

## 5-Year Limited Warranty

## Security Features

Built-in firewall and VPN  
 Modem connection management  
 Passthrough management  
 Account management:  
 Strong passwords  
 User accounts and user groups  
 Detailed group permissions  
 Access management  
 Access attempts logs  
 Account lock upon failed access attempts  
 Retrievable access logs for auditing  
 All system components signed  
 Continuous file monitoring for system integrity

## Protocols

DNP3, IEC 60870-5-101/103/104, IEC 61850, UCA 2.0, ICCP, MODBUS, SEL, GE, ABB, L&G, COOPER, and most electrical industry proprietary protocols

## Connectivity

Up to 128 device connections  
 Up to 64 control center connections  
 Up to 10 000 data points

## Time Synchronization

Input: Modulated/demodulated IRIG-B  
 Output: Demodulated IRIG-B  
 Option: Factory installed GPS clock, with 400 ns accuracy

## Expansion Modules

Maximum 2 per system  
 16-port universal serial module  
 16-port Ethernet switch

## Communications

**Serial**  
 16 to 48 universal (RS-232/422/485)  
 1 RS-232 console  
**Modem**  
 Built-in 33.6 Kbps V.34  
**Ethernet**  
 2 10/100BASE-TX or  
 2 100BASE-FX  
**I/O**  
 1 system status normally-closed contact  
 1 software-controlled normally-open relay

## Electrical

Power supply options  
 21-29 VDC  
 42-56 VDC  
 85-264 VAC / 105-370 VDC  
 50 W consumption

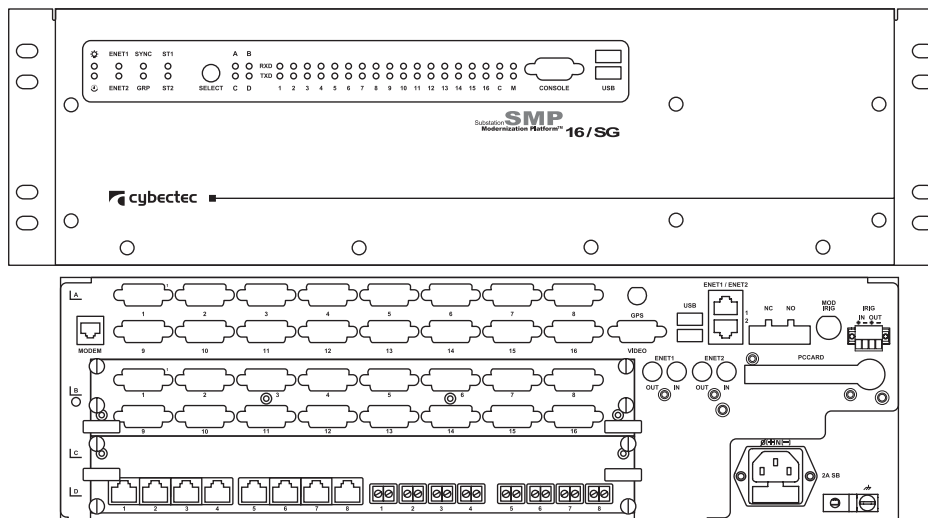
## Environmental

**Temperature**  
 Operating: -40°C to +65°C  
 -40°F to +149°F  
 Storage: -40°C to +85°C  
 -40°F to +185°F  
 Humidity: 5 to 95%, non-condensing

## Mechanical

3U  
 5.22" H x 19" W x 11.02" L  
 132.6 mm H x 482.6 mm W x 280 mm L  
 7.3 to 9 kg / 16 to 20 lb.

## SMP 16/SG Front and Rear Views



**QUEBEC CITY**  
 730 Commerciale Street, Suite 200  
 Saint-Jean-Chrysostome, Quebec Canada G6Z 2C5  
**Technical Support**  
 (418) 834 0009  
 support@cybectec.com

**MONTREAL**  
 1290 St. Denis Street, Suite 400  
 Montreal, Quebec Canada H2X 3J7  
**Sales and marketing**  
 (514) 845 6195, ext. 49  
 sales@cybectec.com

www.cybectec.com