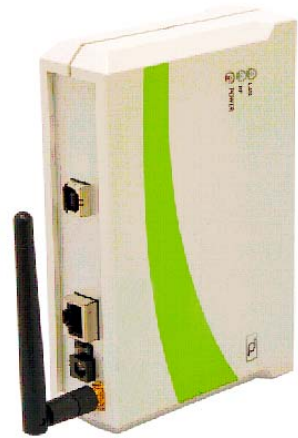




## SC130/ SG131/SG151 Wireless Communication Gateways



The SC and SG series Gateways provide protocol translation and connectivity between the Wireless Sensors network and backend systems. The SG131 is a compact gateway with interfaces for the most widely used serial and industrial fieldbuses built in. The SG150 is primarily designed for deployment in remote locations where no IT infrastructure exists. It optionally includes a GSM/GPRS modem for cellular backhaul, and the extra large 64 MByte buffer ensures that no sensor readings are discarded even in the event of a temporarily lost or weak signal. The SC130 provides simple, inexpensive serial connectivity to a host.

The Gateway devices provide time synchronization, routing and scheduling services to each associated Sensor node. All data and commands are buffered locally. For configuration and management, the SC130 and SG131 provide dedicated (out-of-band) maintenance ports, allowing users to restrict fieldbus communications to the exchange of actual data.



Product Family Gateways	SC130	SG131	SG151
Dimensions <sup>1</sup>	72 x 114 x 33 mm (2.8 x 4.5 x 1.3")	155 x 105 x 40 mm (6.1 x 4.1 x 1.6")	174 x 197 x 50 (6.9 x 7.8 x 2.0")
Weight	140 grams (4.5 oz)	340 grams (10.9 oz)	560 grams (17.9 oz)
Buffer Capacity	16 kByte	512 kByte	64 MByte
Maintenance Port	USB or RS232	USB or RS32 (optional)	-
RS485	-	Optional	-
Ethernet	-	Standard	Standard
Profibus	-	Optional	-
Modbus	-	Optional	-
CAN	-	Optional	-
GSM/GPRS	-	Optional	Optional
Integrated WMS	-	-	✓

<sup>1</sup> Excluding antenna

## Features and Benefits

- Wide choice of connectivity with Profibus, Modbus, CAN, Ethernet and serial ports; cellular option for deployment in locations where no wired backhaul is available
- Manageable via WMS software or AT commands
- True mesh networking support for up to 255 Sensor nodes per Gateway

## Specifications

General		Wireless	
Power source	12 - 24 VDC	Radio type	IEEE 802.15.4 compliant
Current draw	120 mA	Frequency band	2.4 GHz
Network size	Up to 255	Node-to-node hops (max.)	3 <sup>2</sup>
Enclosure rating	IP40	Line of sight range (typical)	250 m (820') node-to-node <sup>3</sup>
Operating temperature range	-20°C to +65°C	In-building range (typical)	70 m (230') node-to-node
Certifications	R/TTE, DIN-EN301489-1, DIN-EN301489-1, CE authorized for use in Europe	Antenna type	External dipole
Ethernet		Antenna connector	Reverse-SMA
Connector	RJ-45	Receiver sensitivity	-92 dBm
Physical medium	UTP	Output power (max.)	2 dBm
Data rate	10/100 Mbps	Output power (typical)	0 dBm
Protocol	TCP/IP	Serial	
USB		Connector	DB9 female
Connector	USB-B female	Physical medium	RS232, RS485
Physical medium	4-wire	Data rate	Up to 115,200 bps (RS232), up to 1 Mbps (RS485)
Data rate	Up to 480 Mbps	Modbus	
Protocol	USB 2.0 Slave	Connector	RJ-45
Profibus		Physical medium	UTP
Connector	DB9 female	Data rate	10 / 100 Mbps
Physical medium	RS485	Protocol	Modbus-TCP Slave
Data rate	Up to 12 Mbps	CAN	
Protocol	Profibus-DPV1 Slave	Connector	DB9 male
GPRS		Physical medium	RS485
Physical medium	850/900/1,800/1,900 MHz	Data rate	Up to 1 Mbps
Data rate	Up to 114 kbps	Protocol	CAN 2.0
Protocol	TCP/IP		

<sup>2</sup> Extendable to up to 5 hops

<sup>3</sup> Extendable to up to 2 km (6,500')

## Complementary Products and Accessories

Specifications are subject to change without notice.



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WMS is the management software suite accompanying the SG and SC series Gateways and is available as a standalone or enterprise version.



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