

## Cellular Connectivity

For GSM/GPRS/EDGE/HSPA+ networks



### Overview

The LS300G-EU is a cellular gateway for use on GSM/GPRS/EDGE/HSPA+ networks.<sup>a</sup>

The LS300G-EU comes standard with Ethernet, USB, and serial interfaces, making it easy for you to configure, deploy,

and connect it to Campbell Scientific dataloggers, cameras, radios and more. The LS300G-EU can be used with any of our dataloggers. The LS300G-EU requires a cellular data account for operation. Please contact your cellular network provider for data service.

### Benefits and Features

#### *Be confident in your choice*

The LS300G-EU is compatible with all Campbell Scientific dataloggers, which allows datalogger and/or software initiated M2M communications through a variety of protocols. The LS300G-EU has a rugged design that adheres to military-specifications for extreme and hazardous conditions (MIL-STD 810). This makes it ideal for industrial deployments, and allows you to be confident that it will work for your application.

#### *Convenient and easy*

Take advantage of the wide coverage of cellular networks to provide an internet connection to your remote data acquisition system. Collect data or control and manage devices through independent IP serial server and Ethernet host connections. You can even configure and troubleshoot your remote LS300G-EU without leaving the office.

### What You Will Need

- SIM card activated with data plan from your cellular provider
- Web browser access to the LS300G-EU for configuration using the browser based AceManager utility
- Serial or Ethernet cable for connecting the LS300G-EU to your device
- SW12 or control port with relay for controlling power
- A plan for how you wish to have your data reported or collected

<sup>a</sup>The variant sold, as standard, in Europe supports the GSM and 3G frequencies of European and most Asian networks.

## Specifications

- › Carrier Approval: AT&T, Rogers, Bell, and Telus
- › Network: 3G HSPA+ with fallback to GSM/GPRS/EDGE

### Host Interfaces

- › 10/100 Base-T RJ45 Ethernet
- › RS-232 serial port, DB9 Female
- › USB version 2.0 with micro-B connector
- › 2 SMA antenna connectors (primary, GPS/diversity)
- › Active antenna support

### Power

- › Input Voltage: 7 to 28 Vdc
- › Typical Current Drain (@12 Vdc):  
Dormant (idle for 10 to 20 s): 185 mA  
Transmit/Receive: 255 mA

### Frequency<sup>b</sup>

- › GSM/GPRS/EDGE: 900/1800 MHz
- › WCDMA: 900/2100 MHz

### Size

- › Dimensions: 76 mm x 90 mm x 25 mm (3.0 in x 3.5 in x 1.0 in)
- › Weight: 190 g (6.7 oz)

### Environmental

- › Operating Temperature Range: -30° to +70°C (-22° to +158°F)
- › Storage Temperature: -40° to +85°C (-40° to +185°F)
- › Humidity: 90% RH @ 60°C
- › Military Specification: MIL-STD-810 conformance to thermal, mechanical shock, and humidity

### Industry Certifications

- › PTCRB, R&TTE, FCC, Industry Canada, CE, RoHS Compliant, Class 1 Div 2

## Ordering Information

### Digital Cellular Modem

**LS300G-EU** Airlink 3G GSM Digital Modem (EU version)

### Communication Cables and Interfaces

**009876-001** Null Modem Cable 9-Pin Male to Male connects the LS300G directly to the data-logger's RS-232 port (#18655)

**SC105** CS I/O to 9-Pin RS-232 DCE Synchronous Interface. Includes SC12 cable for connecting the LS300G-EU to the data-logger's CS I/O port.

**007001** Patch Cable, Unshielded with RJ45 Connectors for connecting the LS300G-EU to a CR6, NL116, NL121 or NL201 (0.5 m).

### Temperature Ranges for SC105

**-ST** -25° to +50°C

**-XT** -55° to +85°C

### Antennas

**009528** Low-cost 2G/3G Antenna (Wall/Pole Mount) W/5M Cable+SMA Connector

**009960** Antenna UMB Enclosure Mount 750-2700 MHz C/W 400 mm CAB (SMA conn) for 2G/3G

### Cables/surge suppressors

Contact Campbell Scientific for details.

<sup>b</sup>This product uses the LS300G Sierra Wireless SL8092 radio module.. Contact Campbell Scientific if you require WCDMA operation for North American frequencies.