

Using the Wavecom GSM Modem Kit

The Wavecom GSM Modem Kit enables your SMS-enabled OPLC to communicate via cellular networks. The kits contain a GSM modem and related hardware.

Kit #	Frequency	Notes
GSM-KIT-21	900/1900MHz	
GSM-KIT-22	900/1800MHz	
GSM-KIT-23	900/1900MHz	These modems can communicate via GSM, GPRS + TCP/IP (class 10) at 900/1800MHz.
GSM-KIT-24		

To use this kit, you must comply with all safety instructions given in the data sheet that accompanies the modem.

Connection

The figure below shows you how to assemble the different elements of the Wavecom GSM Modem Kit, and how to connect the modem to an OPLC.

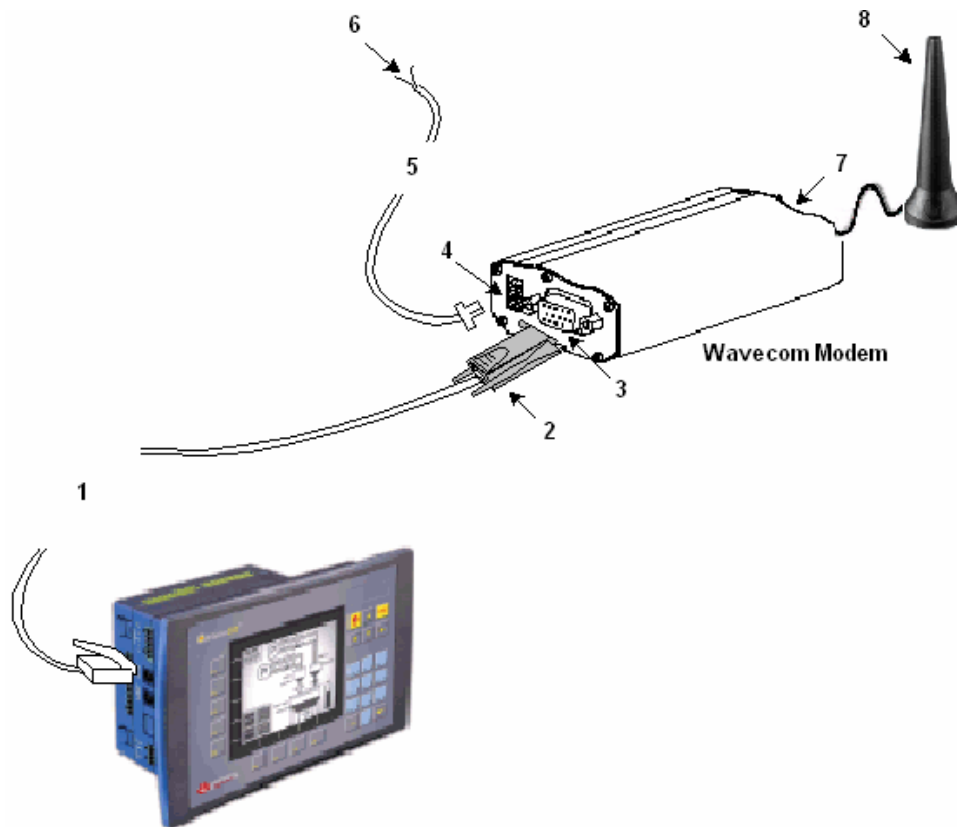


Figure 1 Setting up the Modem

Component Identification, Figure 1

#	Description	Notes
1	RS232 cable, terminated by RJ11 connectors (available by separate order, p/n RS232-CB1)	This cable is not part of the kit. It is used to download programs to an OPLC. The 9-pin female connector supplied with the cable is MJ10-22-CS25. Before you connect the OPLC to the GSM modem, replace this connector with the 15-pin male adapter that is supplied with the kit, MJ10-22-CS29.
2	15 pin male adapter, MJ10-22-CS29	
3	15-pin RS232 port	Located on modem.
4	Power supply connector	Located on modem
5	Power supply cable	Includes fuse.
6	End of power supply cable	Red wire—positive, black wire—negative.
7	SIM card drawer	To open the SIM card drawer, press the button shown in Figure 2 with a pointed object. Note that the drawer should be open only when the modem is turned OFF .
8	GSM antenna	

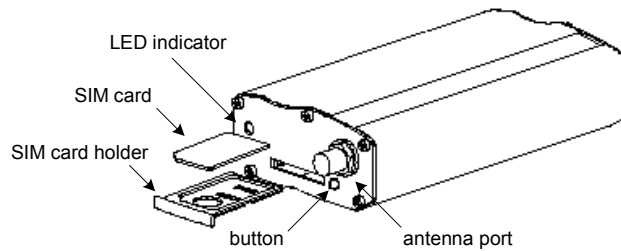


Figure 2 Side View

Mounting the Modem

1. Insert the brackets shown in Figure 3.
2. Screw the modem to a flat surface.

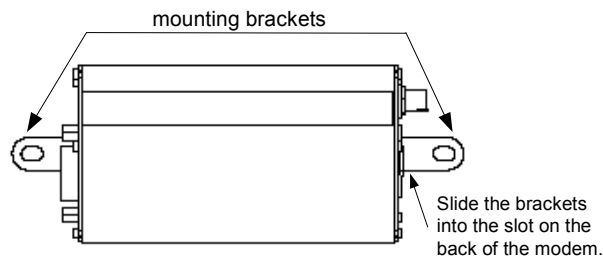


Figure 3 Mounting

Modem RS232 port pin-out

D-type 15 pin female connector (High density):

Pin	Description
1	DCD (Data Carrier Detect)
2	TXD (Transmit Data)
3	Reserved
4	MICROPHONE (+)
5	MICROPHONE (-)
6	RXD (Receive Data)
7	DSR (Data Set Ready)
8	DTR (Data Terminal Ready)
9	GND(Signal Ground)
10	SPEAKER (+)
11	CTS (Clear To Send)
12	RTS (Request To Send)
13	RI (Ring Indicator)
14	RESET
15	SPEAKER (-)

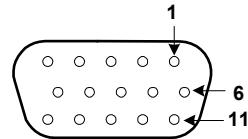


Figure 4 Side View

LED: Status Indication

The LED indicator is red, and is shown in Figure 2.

LED Status:	Indicates the modem is:
OFF	Switched OFF / Not ready
Slow flash	Switched on, registered on network
Fast flash	Transmission mode
ON	Connecting to network

Technical Specifications

Wavecom GSM modem

Input voltage range	5 - 32VDC (5.5 – 32VDC for GPRS class 10)
Status indication	Red LED - see page 3, LED: Status Indication
SIM card	3V or 5V mini SIM card
GSM frequency	According to modem type:

Kit #	Modem type	Frequency
GSM-KIT-21	GSM	900/1800MHz
GSM-KIT-22	GSM	900/1900MHz
GSM-KIT-23	GSM, GPRS + TCP/IP (class 10)	900/1800MHz
GSM-KIT-24		

Weight	GSM-KIT-21, 22,23	<130g (4.58oz.)
	GSM-KIT-24	<90g (3.18oz.)

Dimensions, including connectors	GSM-KIT-21, 22,23	110 x 54 x 25mm (4.3 x 2.12 x 0.98 in.)
	GSM-KIT-24	85 x 54 x 25mm (3.4 x 2.12 x 0.98 in.)

Mounting method	See page 2
Operational temperature	-20 to 55°C (-4 to 131°F)
Storage temperature	-25 to 70°C (-13 to 158°F)
Antenna connector type	SMA

Antenna

Antenna frequency	GSM-KIT-21, 23, 24	900MHz and 1800MHz
	GSM-KIT-22	900MHz and 1900MHz

Accessories (available by separate order)

Part Number	Description
RS232-CB1	RS232 communication cable; this cable is used to connect between the OPLC and modem; it is the same cable used to download programs to an OPLC.
GSM-ACC-21	Accessory kit for Wavecom modem, 900/1800MHz; includes antenna and communication adapter.
GSM-ACC-22	Accessories kit for Wavecom modem, 900/1900MHz; includes antenna and communication adapter.

Unitronics product sold hereunder can be used with certain products of other manufacturers, including but not limited to Wavecom, Hirshman, and Smarteq at the user's sole responsibility.

The information provided is subject to change without notice.

PN:5408-0122-8