

OB-4G-B-AC

4G Modem with M2M multi-network SIM and high gain magnetic antenna



VIEW & BUY
ONLINE



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4G Modem with M2M
multi-network SIM
and high gain
magnetic antenna

Subscription to the Owen Brothers Metering Platform required.

DATASHEET

1 Product Overview

2 Specifications

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1 PRODUCT OVERVIEW

This pre-configured modem is designed for quick and easy installation, ensuring that you are online in seconds to remotely monitor your devices. It is fully compatible with devices that use the Modbus/RS485 communication protocol, providing seamless integration into your existing systems.

To access remote monitoring, a subscription to the Owen Brothers Remote Monitoring Portal is required, allowing you to keep track of performance and devices from anywhere.

Remote Monitoring Kits:

We also offer complete remote monitoring kits, providing a comprehensive metering solution. Pre-wired and ready for installation, they streamline setup and reduce installation time. For a full overview of the available products and services, please refer to our Remote Monitoring Catalogue.

OB-4G-B-AC supports LTE-TDD, LTE-FDD, WCDMA, TD-SCDMA, cellular networks. 4G network supports maximum download data rate 150Mbps, upload data rate 50Mbps.

2 SPECIFICATION

System Information:

Processor/Frequency Cortex-M3/96MHz
2G/3G/4G Interface

RECEIVE SENSITIVITY

TRANSMIT POWER

LTE-TDD:	Class 3(23dBm+1/-3dB)	FDD B1:	-96dBm(10M)
LTE-FDD:	Class 3(23dBm±2dB)	FDD B3:	-96dBm(10M)
WCDMA:	Class 3(24dBm+1/-3dB)	FDD B5:	-96dBm(10M)
TD-SCDMA:	Class 3(24dBm+1/-3dB)	FDD B8:	-96.5dBm(10M)
GSM900:	Class 4(33dBm±3dB)	TDD B38:	-96dBm(10M)
DCS1800:	Class 1(30dBm±3dB)	TDD B39:	-97dBm(10M)
GSM900 8-PSK:	Class E2(27dBm±3dB)	TDD B40:	-96.5dBm(10M)
DCS1800 8-PSK:	Class E2(26dBm±3dB)	TDD B41:	-96dBm(10M)
		WCDMA B1:	-110dBm
		WCDMA B8:	-111dBm
		TDSCDMA B34:	-109dBm
		TDSCDMA B39:	-109dBm
		GSM 900M:	-109dBm
		GSM 1800M:	-109dBm



2 SPECIFICATION (Continued)

LTE

Support 1.4~20MHz RF Bandwidth

Downstream Support Multiple Users MIMO

WCDMA

3GPP R8 DC-HSPA+

16-QAM,64-QAM and QPSK Modulation

TD-SCDMA CCSA Release 3

GSM/cellular network

R99: CSD Transmission Rate: 9.6Kbps/14.4Kbps

Cellular network: Support cellular network multi-slot class 12

Code Method: CS-1/CS-2/CS-3/CS-4

SERIAL PORT		BASIC PARAMETER	
PORT NUMBER:	1	SIM CARD:	Nano SIM card(1.8V/3V)
INTERFACE STANDARD:	RS485	SIZE:	102.03 x 64.95 x 27.50 mm
DATA BITS:	7, 8	OPERATING TEMP.:	-40 ~ 70°C
STOP BIT:	1, 2	STORAGE TEMP.:	-40 ~ 85°C, 5 ~ 95% RH (no condensation)
CHECK BIT:	None, Even, Odd	INPUT VOLTAGE:	100 ~ 240VAC@50 ~ 60Hz
BAUD RATE TTL:	1200 bps~460800 BPS	AVERAGE WORKING CURRENT:	~80MA@12VDC
FLOW CONTROL:	No Flow Control	PEAK CURRENT:	2A
HALF-DUPLEX:	(RS485)		

Configuration:

Firmware Upgrade UART or OTA Upgrade

OB-4G-B-AC is a cellular network solution for serial device networking.

Data transmission via cellular networks makes product integration very easy.

This product meets EMC Class B security level and can pass relevant certification tests in various countries.



3 APPEARANCE

PIN	DESCRIPTION	NET NAME	SIGNAL TYPE	COMMENT
1	AC Power Input	L	Power	100~240VAC Input
2	AC Power Input	N	Power	
5		RS485_B-	IO	RS485 B-
6	Signal GND	GND	Power	Used for RS485 GND, usually leave it unconnected
7		RS485_A+	IO	RS485 A+
ANT	Antenna	ANT		2G/3G/4G SMA Antenna
SIM	SIM Slot	Nano SIM		
Reload	Restore to factory setting button	Reload	I	Contact OBM Support
Reset	Reset button	Reset	I	Hardware reset button
Net	Network status LED	Net	0	Boot On: Bootup is OK 2s Off -> 2s On: GPRS Register is OK 0.1s Off -> 0.1s On: GPRS data is transferring Off: No data transfer
Active	UART Data Transfer	Active	0	0.3s Off -> 0.9s On: UART TX Output 0.3s Off -> 0.3s On: UART RX Receive On: UART bidirection
Power	Power LED	Power	0	On: Power input OK Off: Power input NG
Link	Service connection LED	Link	0	On: Socket A connection OK Off: No Socket A connection

3 APPEARANCE (Continued)



4 TECHNICAL SUPPORT

Technical Support/Sales:

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SALES: sales@owen-brothers.com

www.owen-brothers.com