

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
- 3 Connection Terminals (Appearance)
- 4 Technical Support



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

TRANSMIT POWER

LTE-TDD:	Class 3(23dBm+1/-3dB)
LTE-FDD:	Class 3(23dBm±2dB)
WCDMA:	Class 3(24dBm+1/-3dB)
TD-SCDMA:	Class 3(24dBm+1/-3dB)
GSM900:	Class 4(33dBm±3dB)
DCS1800:	Class 1(30dBm±3dB)
GSM900 8-PSK:	Class E2(27dBm±3dB)
DCS1800 8-PSK:	Class E2(26dBm±3dB)

RECEIVE SENSITIVITY

FDD B1:	-96dBm(10M)
FDD B3:	-96dBm(10M)
FDD B5:	-96dBm(10M)
FDD B8:	-96.5dBm(10M)
TDD B38:	-96dBm(10M)
TDD B39:	-97dBm(10M)
TDD B40:	-96.5dBm(10M)
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

PORT NUMBER:	1
INTERFACE STANDARD:	RS485
DATA BITS:	7, 8
STOP BIT:	1, 2
CHECK BIT:	None, Even, Odd
BAUD RATE TTL:	1200 bps~460800 BPS
FLOW CONTROL:	No Flow Control
HALF-DUPLEX:	(RS485)

BASIC PARAMETER

SIM CARD:	Nano SIM card(1.8V/3V)
SIZE:	102.03 x 64.95 x 27.50 mm
OPERATING TEMP.:	-40 ~ 70°C
STORAGE TEMP.:	-40 ~ 85°C, 5 ~ 95% RH (no condensation)
INPUT VOLTAGE:	100 ~ 240VAC@50 ~ 60Hz
AVERAGE WORKING CURRENT:	~80mA@12VDC
PEAK CURRENT:	2A

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
Active	UART Data Transfer	Active	0	Off: No data transfer 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