

# 2011

M-450/G CDMA/GPRS Modem



Forwell Wireless Co., Ltd.

## I. FEATURES

M-450/G is CDMA and GPRS modem, it was designed to be used in industrial environment with follow main features:

- GPRS and CDMA module inside;
- Support SMS, TCP /IP protocol;
- Auto Connect/Disconnect as preprogram time schedule;
- Auto reset in multi mode;
- Support Connect/Disconnect to/from server by SMS or time schedule;
- Enters transmission mode when power on;
- Remote setup via SMS or TCP/IP
- Compact and easy to integrate into your solution;
- Multi-flexible and compact data interface: RS232 or RS485;
- Data encryption;
- Multi-operating status LED;
- Optimized modularization design, easy to upgrade.



## II. SPECIFICATIONS

<b>GPRS module</b>	
<b>Sensitivity</b>	-107 dBm @ 850 / 900 MHz, -106 dBm @ 1800 / 1900MHz
<b>Frequency Bands</b>	Quad-band EGSM, 2W @ 850 / 900 MHz, 1W @ 1800/ 1900 MHz
<b>Output Power</b>	Class 4 (2 W) @ EGSM900 Class 1 (1 W) @ GSM1800
<b>Configuration</b>	AT+i commands AT commands
<b>GPRS Connectivity</b>	GPRS Multi-Slot Class 10 GPRS Mobile Station class B
<b>Speed</b>	Downlink: 153.6kbps Uplink: 42.8kbps
<b>Coding Scheme</b>	CS-1, CS-2, CS-3 and CS-4
<b>Authentication Protocol</b>	PAP / CHAP
<b>Antenna</b>	SMA – 50 ohm
<b>CDMA module</b>	
<b>Sensitivity</b>	-104 dBm(FER≤0.5%)
<b>Frequency Bands</b>	450Mhz block A-B
<b>Output Power</b>	23dBm ~ 30dBm
<b>Configuration</b>	AT+i commands

	AT commands
<b>Protocol</b>	IS-95 A/B, IS-98A, IS-126, IS-637A, IS683, IS-707A,IS-2000
<b>Speed</b>	Downlink: 153.6kbps Uplink: 153.6kbps
<b>Coding Scheme</b>	8EVRC, 13kQCELP
<b>Authentication Protocol</b>	PAP / CHAP
<b>Antenna</b>	SMA – 50 ohm
<b>Modem</b>	
<b>Input Voltage</b>	DC 6 to 32V
<b>IP Class</b>	51
<b>SIM card</b>	1.8/3V
<b>Serial Interface</b>	DB9 – RS232 ( RS485 option)
<b>LED Indicator</b>	Power , CDMA/GPRS operation state
<b>Power consumption</b>	Idle mode: 0.23W Transmission mode: Max: 2.26W
<b>Working temperature</b>	-10 <sup>0</sup> C to 55 <sup>0</sup> C
<b>Storage temperature</b>	-10 <sup>0</sup> C to 75 <sup>0</sup> C
<b>Humidity range</b>	< 95%, non condensing
<b>Weigh</b>	200g
<b>Dimension</b>	120(L)x66(W)x27(H) mm

### III. ACCESSORIES

<b>Adapter</b>	
<b>Input Voltage</b>	AC 100 to 245V
<b>Output Voltage</b>	12VDC
<b>Output power</b>	Max. 2Amp
<b>Protection</b>	Inside AC Resister Fuse Output DC 1A fuse MOSFET current & voltage driver
<b>Power consumption</b>	No Load: < 0.8VA Working mode: Max. 7VA
<b>Working temperature</b>	-10 <sup>0</sup> C to 55 <sup>0</sup> C
<b>Storage temperature</b>	-20 <sup>0</sup> C to 75 <sup>0</sup> C
<b>AC/DC Connector</b>	AC: Solder wire ending DC: 4 pins connector
<b>Antenna</b>	
<b>Type</b>	Magnetic mount type
<b>Frequency Bands</b>	CDMA: 450Mhz ; GPRS: 900/1800Mhz band
<b>VSWR</b>	<1.5:1
<b>Connector</b>	50 ohm SMA
<b>Cable length</b>	2.5m
<b>Gian</b>	3.5dbm

## IV. APPLICATIONS

- Remote Data Monitor and Control
- Water, gas and oil flow metering
- AMR (automatic meter reading)
- Power station monitoring and control
- Remote POS (point of sale) terminals
- Traffic signals monitor and control
- Fleet management
- Power distribution network supervision
- Central heating system supervision
- Weather station data transmission
- Hydrologic data acquisition
- Vending machine
- Traffic info guidance
- Parking meter and Taxi Monitor
- Telecom equipment supervision (Mobile base station, microwave or optical relay station)

## V. PRODUCTION LIST

Name	Unit	Number	Description
Modem	Entries	1	Standard supply
Adapter	Entries	1	Supply 12V
Antenna	Entries	2	Standard supply
Cable	Entries	1	Cable connect to meter
Stick	Entries	1	
Installation manual	Entries	1	

©Shenzhen Forwell Wireless Co., Ltd

ADDRESS: 2-4A, Chaguang Industrial Park, Nanshan District, Shenzhen, P.R.China

Tel: 86-755-88839200

Fax: 86-755-26621490

Web: <http://www.forwellwireless.com>