

## M400 Series Cellular Modem Datasheet



### >>| Product Introduction

The M400 series Cellular Modem is a complete wireless data modem providing global cellular network connectivity; where cellular signal available, with 4G/3G/2G fallback capabilities for ensured access to the internet anywhere, providing RS232/RS485/USB port option.

The M400 is an easy to install productivity tool designed to provide maximum accessibility to the mobile professional allowing quick access to the internet for real-time business transactions, email, web browsing and more.

E-Lins' mobile data products are widely used in more than twenty industrial fields, such as power control, water schedule, traffic, oil field, weather forecast, environmental protection, street lamp control, post, bank and many other areas.

### >>| Hot Spot

Built-in 2G/3G/4G industrial cellular module, insert SIM/UIM card to work directly;

Built-in sim/uim card slot;

Broadband M2M communications

SIM failover/standby APN

3G/4G failover for fixed line broadband connections

Rapid service deployment applications

Support At command

RS232/RS485/USB/RJ45 port option

#### **Option Features:**

Voice Supported

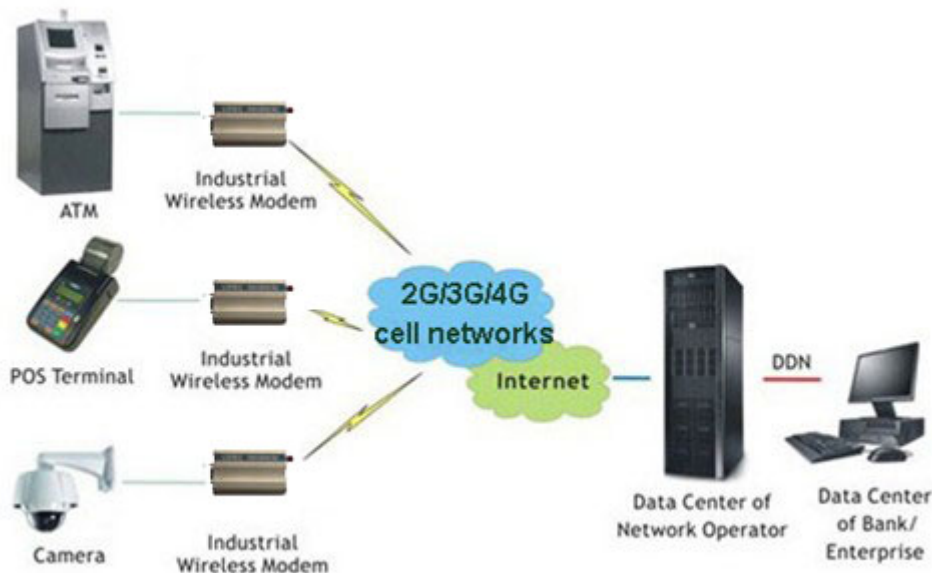
Built-in TCP/IP Stack

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GPS

## >>| Typical Diagram



## >>| Industrial Application

- Remote Data Monitor and Control
- CCTV, security surveillance
- Water, gas and oil flow metering and schedule
- AMR (automatic meter reading)
- Power station monitoring and control
- Remote POS (point of sale) terminals, ATM,
- Traffic signals monitor and control, Traffic info guidance
- Oil field, weather forecast, environmental protection, street lamp monitoring and control
- Early Warning of Mountain Torrent
- Fleet management
- Power distribution network supervision
- Central heating system supervision
- Weather station data transmission
- Hydrologic data acquisition
- Vending machine
- Telemetry, SCADA

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- Vehicle logistics and diagnostics controlling
- Parking meter and Taxi Monitor
- Telecom equipment supervision (Mobile base station, microwave or optical relay station)

## >>| Specification

Wireless																	
<b>Mobile Networks</b>	UMTS WCDMA (HSUPA/HSDPA/HSPA/HSPA+) GSM EDGE GSM GPRS CDMA1x CDMA2000 EVDO Rev 0 and Rev A																
<b>Cellular Frequency</b>	UMTS/HSPA/HSUPA/HSPA/HSPA+ (WCDMA/FDD) 2100Mhz or 850/1900/2100 MHz or 850/900/1900/2100Mhz Quad-band EGSM 850/900/1800/1900 CDMA1x/EVDO: 800/1900Mhz or 450Mhz optional																
Data																	
<b>Bandwidth</b>	<table border="0"> <tr> <td>HSPA+</td> <td>Downlink 21/42Mbps Uplink 5.76Mbps</td> </tr> <tr> <td>HSPA</td> <td>Downlink 14.4Mbps Uplink 5.76Mbps</td> </tr> <tr> <td>HSUPA</td> <td>Downlink 7.2Mbps Uplink 5.76Mbps</td> </tr> <tr> <td>HSDPA</td> <td>Downlink 7.2 Mbps Uplink 384k bps</td> </tr> <tr> <td>WCDMA/UMTS</td> <td>Downlink/Uplink 384 kbps</td> </tr> <tr> <td>EDGE</td> <td>Downlink 236.8 kbps Uplink 118 kbps</td> </tr> <tr> <td>GPRS</td> <td>Downlink 85.6 kbps Uplink 42.8 kbps</td> </tr> <tr> <td>CDMA1x</td> <td></td> </tr> </table>	HSPA+	Downlink 21/42Mbps Uplink 5.76Mbps	HSPA	Downlink 14.4Mbps Uplink 5.76Mbps	HSUPA	Downlink 7.2Mbps Uplink 5.76Mbps	HSDPA	Downlink 7.2 Mbps Uplink 384k bps	WCDMA/UMTS	Downlink/Uplink 384 kbps	EDGE	Downlink 236.8 kbps Uplink 118 kbps	GPRS	Downlink 85.6 kbps Uplink 42.8 kbps	CDMA1x	
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	Downlink/Uplink 153.6kbps CDMA2000 EVDO Rev A: 3.1Mbps downlink, 2.4Mbps uplink Rev O: 2.4Mbps downlink, 153.6kbps uplink
<b>Interface</b>	
<b>Antenna</b>	50Ω SMA female interface, external replaceable Version without GPS: 1 Unit Version with GPS: 2 Unit
<b>Serial port</b>	DB9 or DB15 (RS232/RS485 optional)
<b>Led</b>	Power indicator Data indicator
<b>UIM/SIM</b>	1.8V/3V
<b>SIM card slot</b>	Yes, one unit
<b>USB</b>	USB 2.0 female, Mini USB
<b>GPS</b>	Supported (For version support GPS only)
<b>Voice port</b>	Supported (For version support only)
<b>Power</b>	
<b>Power supply</b>	DC7V-36V, typical DC9V1A
<b>Power consumption</b>	Peak: 700mA@+9VDC Average: 85mA@+9VDC Idle: 30mA@+9VDC
<b>Software</b>	
<b>OS</b>	Windows 8.1, 8, 7, Vista, XP, 2000, Me, 98 Mac OS Linux
<b>At command</b>	Support at command; Packed with GUI software
<b>TCP/IP Stack</b>	Supported (For version support only)
<b>Physical</b>	

<b>Operating Temperature</b>	Work temperature: -30°C to 75°C Storage temperature: -40°C to 85°C
<b>Humidity</b>	95% Maximum (Non-condensing)
<b>Dimensions</b>	Item (L x B x H): 83mm*53mm*25mm Packaging (L x B x H): 260mm x 190mm x 65mm
<b>Weight</b>	Item: 180g Packaging: 1.6 lbs
<b>Electromagnetic compatibility</b>	anlistatig test: Class 3 Radio electromagnetism test: Class 3
<b>Others</b>	
<b>Warranty</b>	1 Year, can extend to 5 years
<b>Model</b>	<b>Marks</b>
<b>M400gsm-DB9-RS232</b>	GSM Modem, GSM 900/1800Mhz, DB9 por-RS232 port t; working under GSM networks
<b>M400gsm-DB15-RS232</b>	GSM Modem, GSM 900/1800Mhz, DB9 to DB15 RS232 port; working under GSM networks
<b>M400gsm-USB</b>	GSM Modem, GSM 900/1800Mhz, USB port working under GSM networks
<b>M400g-DB9-RS232</b>	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 RS232 port working under GSM/GPRS networks
<b>M400g-DB9-RS485</b>	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 RS485 port working under GSM/GPRS networks
<b>M400g-DB15-RS232</b>	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 to DB15 RS232 port working under GSM/GPRS networks
<b>M400g-DB15-RS485</b>	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 to DB15 RS485 port working under GSM/GPRS networks
<b>M400g-DB9-RS232-t</b>	GPRS Modem, GSM/GPRS 900/1800/1900Mhz, DB9 RS232 port working under GSM/GPRS networks
<b>M400g-DB9-RS232-q</b>	GPRS Modem, GSM/GPRS 850/900/1800/1900Mhz, DB9 RS232 port working under GSM/GPRS networks

<b>M400g-USB-d</b>	GPRS Modem, GSM/GPRS 900/1800Mhz, USB port working under GSM/GPRS networks
<b>M400g-USB-q</b>	GPRS Modem, GSM/GPRS 850/900/1800/1900Mhz, USB port working under GSM/GPRS networks
<b>M400g-RJ45-d</b>	GPRS Modem, GSM/GPRS 900/1800Mhz, RJ45 port working under GSM/GPRS networks
<b>M400g-RJ45-q</b>	GPRS Modem, GSM/GPRS 850/900/1800/1900Mhz, RJ45 port working under GSM/GPRS networks
<b>M400e-DB9-RS232-d</b>	EDGE Modem, GSM/GPRS/EDGE 900/1800Mhz, DB9-RS232 port; working under GSM/GPRS/EDGE networks
<b>M400e-DB9-RS232-q</b>	EDGE Modem, GSM/GPRS/EDGE 850/900/1800/1900Mhz, DB9-RS232 port; working under GSM/GPRS/EDGE networks
<b>M400e-USB-d</b>	EDGE Modem, GSM/GPRS/EDGE 900/1800Mhz, USB port; working under GSM/GPRS/EDGE networks
<b>M400e-USB-q</b>	EDGE Modem, GSM/GPRS/EDGE 850/900/1800/1900Mhz, USB port; working under GSM/GPRS/EDGE networks
<b>M400c-DB9-RS232-s</b>	CDMA Modem, CDMA 800Mhz, DB9-RS232 port; working under CDMA networks
<b>M400c-DB9-RS232-d</b>	CDMA Modem, CDMA 800/1900Mhz, DB9-RS232 port; working under CDMA networks
<b>M400ev-DB9</b>	3G CDMA2000 EVDO Modem, CDMA/EVDO 800/1900Mhz, DB9-RS232 port, USB port optional; working under CDMA//EVDO networks, voice port optional
<b>M400d-DB9</b>	3G WCDMA Modem, GSM/UMTS 850/900/1800/1900/2100Mhz, DB9-RS232 port, USB port optional; working under GSM/GPRS/EDGE/HSDPA networks, voice port optional
<b>M400d-DB9-GPS</b>	3G WCDMA Modem + GPS, GSM/UMTS 850/900/1800/1900/2100Mhz, DB9-RS232 port, USB port optional; working under GSM/GPRS/EDGE/HSDPA networks, voice port optional
<b>M400u-DB9</b>	3G WCDMA Modem, GSM/UMTS 850/900/1800/1900/2100Mhz, DB9-RS232 port, USB port optional; working under GSM/GPRS/EDGE/HSDPA/HSUPA/HSPA networks, voice port optional

## Option Features:

- 1) GPS

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- 2) Voice
- 3) TCP/IP stack

**Notes: Please inform to sales while you make order if need the option features.**

## >>| Accessories

- The M400 Series Modem
- USB cable (For version support usb only)
- DC 9V1A Power Adapter
- Antenna
- CD-ROM with Product Documentation
- DB9 cable (For version support RS232/RS485 only)



DB15 to DB9 Cable

DB9 serial cable

RJ45 to DB9 Cable

USB Cable



EU Power Supplier

US Power Supplier

AU Power Supplier

Desktop Power Supplier

UK Power Supplier

EU, US, AU, UK for choice



Metal Mangetic-Mount W/ Cable

Rubber antenna

Rubber Mangetic-Mount W/ Cable

CD-Rom with Manual/Data

### Notes:

- 1) We packed the units with free accessories; default packed depends on stock and the device's feature requirement. If you need specify the type, please inform us when you order.
- 2) Different places have different band and frequency. Signal quality affects the data speed. The antenna in the packages is free default. It's a world-wide use type. Our free antenna may not get good signal or good speed in your area. Please get the dedicated antenna for your area yourself to get the best signal and data speed.

