

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

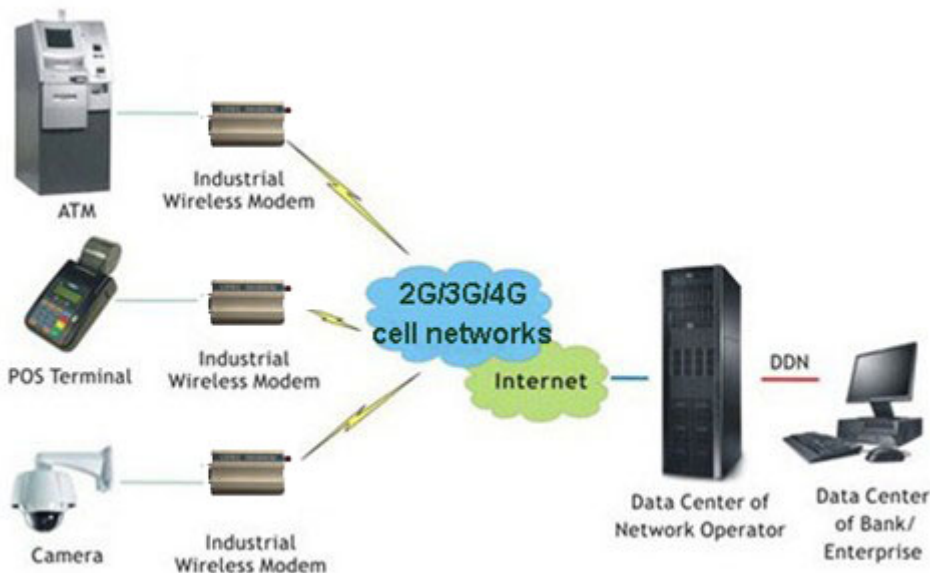
E-Lins Technology Co., Limited

Add: #901-902, Unit B, Jiayun Bld., Huada Rd., Dalang, Longhua, Shenzhen, 518000, China

Tel: +86-755-29230581 83700465 E-mail: sales@szelins.com www.szelins.com www.e-lins.com

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

E-Lins Technology Co., Limited

Add: #901-902, Unit B, Jiayun Bld., Huada Rd., Dalang, Longhua, Shenzhen, 518000, China
Tel: +86-755-29230581 83700465 E-mail: sales@szelins.com www.szelins.com www.e-lins.com

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

>>| Specification

Wireless	
Mobile Networks	UMTS WCDMA (HSUPA/HSDPA/HSPA/HSPA+/DC-HSPA+) GSM EDGE/GPRS CDMA1x CDMA2000 EVDO Rev 0/Rev A/Rev B TD-SCDMA(TD-HSDPA/TD-HSUPA) 4G LTE (FDD/TDD)
Cellular Frequency	UMTS/HSPA/HSUPA/HSPA/HSPA+/DC-HSPA+ (WCDMA/FDD) 850/1900/2100 MHz or 850/900/1900/2100Mhz/AWS optional Quad-band EGSM 850/900/1800/1900Mhz CDMA1x/EVDO: 800/1900Mhz or 450Mhz optional 4G FDD LTE: Band 1--2100Mhz Band 2--1900Mhz Band 3--1800Mhz Band 4—AWS(1700/2100Mhz) Band 5--850Mhz Band 7--2600MHz Band 8--900Mhz Band 12--700Mhz Band 13--700(B13)Mhz Band 17--700(B17)/AWS Band 19—800Mhz Band 20--DD800Mhz Band 21 Band 25 –1900Mhz G Block Band 31– 450Mhz Other FDD band(some bands are not listed)... 4G TDD LTE (TD-LTE): Band 41 –2500/2600Mhz Band 40 -- 2300Mhz

	<p>Band 39 – 1900Mhz Band 38 -- 2600Mhz Other TDD band(some bands are not listed)...</p> <p>3G TD-SCDMA: 2010~2025MHz/1880~1920MHz</p> <p>Notes: There are many different band and frequency for 4G LTE. Please confirm the detailed band and frequency with your carriers before order.</p>
Data	
Bandwidth	<p>4G LTE FDD LTE: 100Mbps or 150Mbps or 300Mbps downlink, 50Mbps uplink; TDD LTE: 150Mbps downlink, 50Mbps uplink;</p> <p>DC-HSPA+: Downlink 42Mbps, Uplink 5.76Mbps; HSPA+(H): Downlink 21Mbps, Uplink 5.76Mbps; HSPA+(L): 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;</p> <p>EDGE: Downlink 236,8 kbps, Uplink 118 kbps; GPRS: Downlink 85.6 kbps, Uplink 42.8 kbps;</p> <p>CDMA1x: Downlink/Uplink 153.6kbps; CDMA EVDO: Rev B: 14.7Mbps downlink, 5.4Mbps uplink Rev A: 3.1Mbps downlink, 2.4Mbps uplink Rev O: 2.4Mbps downlink, 153.6kbps uplink</p> <p>3G TD-SCDMA: 2.8Mbps</p> <p>Notes: the bandwidth is peak value. Real value depends on carrier network support.</p>
Interface	
Antenna	<p>50Ω SMA female interface, external replaceable Version without GPS: 1 Unit Version with GPS: 2 Unit</p>

Serial port	DB9 or DB15 (RS232/RS485 optional)
Led	Power indicator Data indicator
UIM/SIM	1.8V/3V
SIM card slot	Yes, one unit
USB	USB 2.0 female, Mini USB
GPS	Supported (For version support GPS only)
Voice port	Supported (For version support only)
Power	
Power supply	DC7V-36V, typical DC9V1A
Power consumption	Peak: 700mA@+9VDC Average: 85mA@+9VDC Idle: 30mA@+9VDC
Software	
OS	Windows; Mac OS; Linux; Other OS with hardware USB/RS232/RS485 port;
At command	Support at command; Packed with GUI software
TCP/IP Stack	Supported (For version support only)
Physical	
Operating Temperature	Work temperature: -30°C to 75°C Storage temperature: -40°C to 85°C
Humidity	95% Maximum (Non-condensing)
Dimensions	Item (L x B x H): 83mm*53mm*25mm Packaging (L x B x H): 260mm x 190mm x 65mm
Weight	Item: 180g Packaging: 1.6 lbs

Electromagnetic compatibility	anlistatig test: Class 3 Radio electromagnetism test: Class 3
Others	
Warranty	1 Year, can extend to 5 years
Model	Marks
M400gsm-DB9-RS232	GSM Modem, GSM 900/1800Mhz, DB9 por-RS232 port t; working under GSM networks
M400gsm-DB15-RS232	GSM Modem, GSM 900/1800Mhz, DB9 to DB15 RS232 port; working under GSM networks
M400gsm-USB	GSM Modem, GSM 900/1800Mhz, USB port working under GSM networks
M400g-DB9-RS232	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 RS232 port working under GSM/GPRS networks
M400g-DB9-RS485	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 RS485 port working under GSM/GPRS networks
M400g-DB15-RS232	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 to DB15 RS232 port working under GSM/GPRS networks
M400g-DB15-RS485	GPRS Modem, GSM/GPRS 900/1800Mhz, DB9 to DB15 RS485 port working under GSM/GPRS networks
M400g-DB9-RS232-t	GPRS Modem, GSM/GPRS 900/1800/1900Mhz, DB9 RS232 port working under GSM/GPRS networks
M400g-DB9-RS232-q	GPRS Modem, GSM/GPRS 850/900/1800/1900Mhz, DB9 RS232 port working under GSM/GPRS networks
M400g-USB-d	GPRS Modem, GSM/GPRS 900/1800Mhz, USB port working under GSM/GPRS networks
M400g-USB-q	GPRS Modem, GSM/GPRS 850/900/1800/1900Mhz, USB port working under GSM/GPRS networks
M400g-RJ45-d	GPRS Modem, GSM/GPRS 900/1800Mhz, RJ45 port working under GSM/GPRS networks
M400g-RJ45-q	GPRS Modem, GSM/GPRS 850/900/1800/1900Mhz, RJ45 port

	working under GSM/GPRS networks
M400e-DB9-RS232-d	EDGE Modem, GSM/GPRS/EDGE 900/1800Mhz, DB9-RS232 port; working under GSM/GPRS/EDGE networks
M400e-DB9-RS232-q	EDGE Modem, GSM/GPRS/EDGE 850/900/1800/1900Mhz, DB9-RS232 port; working under GSM/GPRS/EDGE networks
M400e-USB-d	EDGE Modem, GSM/GPRS/EDGE 900/1800Mhz, USB port; working under GSM/GPRS/EDGE networks
M400e-USB-q	EDGE Modem, GSM/GPRS/EDGE 850/900/1800/1900Mhz, USB port; working under GSM/GPRS/EDGE networks
M400c-DB9-RS232-s	CDMA Modem, CDMA 800Mhz, DB9-RS232 port; working under CDMA networks
M400c-DB9-RS232-d	CDMA Modem, CDMA 800/1900Mhz, DB9-RS232 port; working under CDMA networks
M400ev-DB9	3G CDMA2000 EVDO Modem, CDMA/EVDO 800/1900Mhz, DB9-RS232 port, USB port optional; working under CDMA//EVDO networks, voice port optional
M400d-DB9	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
M400d-DB9-GPS	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
M400u-DB9	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
- 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
EU, US, AU, UK for choice



UK Power Supplier



Metal Magnetic-Mount W/ Cable



Rubber antenna



Rubber Magnetic-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.