MC90 Global LTE terminal

Since 1948 75 YEARS Made in Germany

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The MC90 is an LTE Cat 4 global cellular modem optimized for M2M and IoT applications.

It is backward compatible to EDGE and GSM/GPRS ensuring that it can even be connected in areas missing 4G or 3G.

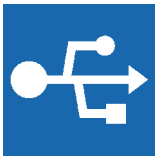
AT commands can be used to send and receive SMS messages as well as data via TCP/IP, FTP(S), HTTP(S) and MQTT directly.

Key features & functionalities:

- IoT/M2M-optimized LTE Cat 4 global cellular modem
- Quectel EG25-G module integrated
- Worldwide LTE, UMTS/HSPA(+) and GSM/GPRS/EDGE coverage
- GNSS Receiver (GPS)

LTE Cat 4


RS-232


USB 2.0


GNSS


Global

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MC90 Global

Technical Data

Product		Art.-No.
Model designation	MC90 Global Terminal	193379
General	**Description**	
Type	LTE Cat 4 Global cellular modem	
Dimensions (W x H x D)	74 x 33 x 65 mm	
Weight	85 g	
Supply voltage	6 V to 30 V DC (min. 12 W guaranteed output power of power supply)	
Average power consumption	at full load (data transfer): 1.27 W in idle mode: 0.30 W	
Operation temperature	-35°C to +75°C	
Housing	ABS	
Protection class	IP20	
Mounting	Tabletop / DIN rail (with optional mounting kit)	
Wireless module embedded	Quectel EG25-G	
Mobile		
Supporting networks	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28	
	LTE-TDD: B38/B39/B40/B41	
	WCDMA: B1/B2/B4/B5/B6/B8/B19	
	GSM: B2/B3/B5/B8	
	GNSS: GPS/GLONASS/BDS/Galileo/QZSS	
Transmission rates LTE-FDD	Max. 150 Mbps (DL)/Max. 50 Mbps (UL)	
Transmission rates LTE-TDD	Max. 130 Mbps (DL)/Max. 30 Mbps (UL)	
Transmission rates DC-HSDPA	Max. 42 Mbps (DL)	
Transmission rates HSUPA	Max. 5.76 Mbps (UL)	
Transmission rates WCDMA	Max. 384 kbps (DL)/Max. 384 kbps (UL)	
Transmission rates EDGE	Max. 296 kbps (DL)/Max. 236.8 kbps (UL)	
Transmission rates GPRS	Max. 107 kbps (DL)/Max. 85.6 kbps (UL)	
Interfaces		
Power	RJ12	
RS-232	Sub-D	
USB	2.0 Type B	
GSM antenna	SMA (female)	
GNSS antenna	SMA (female)	
SIM	Mini SIM (lockable)	
Other properties		
Protocols	TCP, UDP, PPP, FTP, HTTP, NTP, PING, QMI, NITZ, SMTP, MQTT, CMUX, HTTPS, FTPS, SMTPS, SSL, MMS, FILE	
Approvals	CE; Country-specific approvals upon request	
Accessories		**Art.-No.**
Portable antenna	GSM/UMTS/LTE, 48 mm, SMA (male)	194306
Magnetic base antenna	GSM/UMTS/LTE, 2 dBi, 2.5 m RG174, SMA male	101057
GPS antenna	GPS/GLONASS magnetic, 3 m RG174, SMA male	101259
Power supply	12 V DC with RJ12 plug	100910
Power adapter	RJ12, open end, approx. 1.5 m	160571
USB cable	A/B, 1 m	100897
USB cable	A/B, 1.8 m	100898
Data cable RS232	9 pin plug / 9 pin jack, 1.5 m	100891
Mounting Kit	For DIN rail	100901

Errors and omissions excepted.

Notes:

- Idle means that the module is registered in the network but no active data transfer is taking place.
- Actual power consumption may vary depending on signal strength and network quality.
- Safety recommendation: We recommend using a power supply with at least 4 to 5W output power to safely absorb short-term power peaks (e.g. when establishing a network connection or during the boot process).
- The MC90,MC92, and MC93 can reach more than 40mA at startup (by 12V).The overtime power consumption can vary based on the signal quality. In our test we notice an over time consumption of around 30mA for MC93.

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