

# DATA SHEET TELIT ML865C1-EA WIRELESS MODULE

## KEY BENEFITS

Design once and deploy globally, thanks to the xL865 form factor family

Compact VQFN package is ideally suited for low profile integrated solutions, limited real estate application boards, reducing cost in high-volume applications, as well as saving space and weight in portable devices

Perfect platform for regional IoT applications such as smart metering, security & surveillance, point of sales,

health monitoring, fleet management, asset tracking and wearable devices

## NETWORK

<b>3GPP Protocol Stack Compliance</b>	Release 13
<b>Support for TS.34 IoT Communication Efficiency</b>	None
<b>Wireless Protocol Support</b>	
2G/GPRS	Supported
3G/UMTS	None
4G/LTE	None
LTE-M	Supported
NB-IoT	Supported
<b>Frequency Band Support</b>	
2G Bands (MHz)	B2(1900), B3(1800), B5(850), B8(900)
3G Bands (MHz)	None
4G Bands (MHz)	None
LTE-M	B3, B5, B8, B20, B28
NB-IoT Bands (MHz)	B3, B5, B8, B20, B28
<b>3GPP Classes / Categories</b>	
CSD	None
GPRS Multislot Class (DL/UL)	None
EDGE Class (DL/UL)	None
HSDPA Category (DL)	None
HSUPA Category (UL)	None
LTE Category	None
LTE-M Category	M1 1)
NB-IoT Category	NB1
<b>Short Message Service (SMS)</b>	Text, PDU mode
<b>Speech Codecs</b>	None
<b>Protocol Support</b>	UDP, TCP IPv4/6
<b>Firmware Updates</b>	UART, FOTA
<b>Integrated Positioning Technology</b>	
GPS	Supported
GLONASS	Supported

1) Device not certified by Deutsche Telekom for LTE-M deployment

Control Plane A-GPS Support	None
SUPL A-GPS Support	None
<b>Regulatory</b>	
eCall	None
Standalone / Assisted GNSS	GPS, GLONASS, BeiDou/Compass, Galileo, QZSS
TTY	None

## HARDWARE

Dimensions (L x W x H, mm)	24.4 x 24.4 x 2.6
Weight (g)	< 3
On-board Memory	None
Operating Temperature – Extended Operation (°C)	-40° C to +85° C
Supply Voltage Range (V)	3.8 VDC (Nominal)
<b>Interfaces</b>	
USB 2.0 (480 Mbps)	Supported
ASC0 HS Serial Modem	None
GPIO Lines	Supported
UICC and U/SIM (1.8 V/3 V)	1.8 V / 3.0 V
ADC and I2C	I <sup>2</sup> C
Digital Audio, prepared for Analog Audio	None



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## CERTIFICATION DETAILS

GMA Certification	None
Deutsche Telekom Certification Date (Initial Firmware)	MOB.220003
Certified Deutsche Telekom Affiliates	AT, CZ, DE, HR, NL, PL, SK
Certifying Entity	DTAG ITS-IVA
DT Certification Type (Conditions)	<b>Full</b>
<b>Deutsche Telekom Affiliate Country Codes</b>	
AT	T-Mobile Austria GmbH
CZ	T-Mobile Czech Republic a.s.
DE	Telekom Deutschland GmbH
GR	COSMOTE Mobile Telecommunications S.A.
HR	Hrvatski Telekom d.d.
HU	Magyar Telekom Telecommunications plc
ME	Crnogorski Telekom a.d. Podgorica
MK	Makedonski Telekom AD – Skopje
NL	T-Mobile Netherlands B.B.
PL	T-Mobile Polska S.A.
RO	Telekom Romania Mobile Communications S.A.
SK	Slovak Telekom, a.s.



## CONTACT

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