



TRM500

5G MODEM WITH USB TYPE-C



Energy &
utilities



Enterprise



Industrial &
automation



Retail



Smart city

5G

Ultra-high cellular speeds of up to 3.4 Gbps

FUTURE-PROOFING

Backward compatible with 4G (Cat 19) and 3G

USB TYPE-C

For simultaneous network data and powering

COMPACT

Small size, easy installation

Mobile

Mobile module	5G Sub-6Ghz SA/NSA 2.4/3.4Gbps DL (4×4 MIMO), 900/550 Mbps UL (2×2); 4G (LTE) – LTE Cat 19 1.6Gbps DL, Cat 18 200Mbps UL; 3G – 42 Mbps DL, 5.76Mbps UL
3GPP Release	Release 16

Power

Connector	1 x 4-pin industrial DC power socket 1 x USB Type-C (The USB host must provide 5V @ 3A to power the device via the USB Type-C port)
Input voltage range	4-pin: 9 - 30 VDC, overvoltage protection, reverse polarity protection, surge protection >35 VDC 10us max USB Type-C: 5 VDC
Power consumption	Idle: < 5 W, Max: < 12 W

Physical Interfaces

Status LEDs	1 x Power LED, 1 x 5G LED, 1 x Network LED
SIM	1 x SIM slot (Mini SIM – 2FF), 1.8 V/3 V
Power	1 x 4-pin power connector 1 x USB Type-C (The USB host must provide 5V @ 3A to power the device via the USB Type-C port)
Antennas	4 x SMA for Mobile
Other	1 x Virtual network interface via USB Type-C (For power and network data)

Physical Specification

Casing material	Anodized aluminium housing and panels
Dimensions (W x H x D)	83 x 25 x 85.4 mm
Weight	94.5 g
Mounting options	DIN rail, wall mount, flat surface (all require additional kit)

Operating Environment

Operating temperature	-40 °C to 75 °C
Operating humidity	10% to 90% non-condensing
Ingress Protection Rating	IP30

TRM SOFTWARE

Management Software	Windows Connection Manager, Modem Manager (Linux)
USB Serial Driver	Windows 7/8/8.1/10/11,Linux 2.6~6.3,Android 4.x ~ 13
GNSS Driver	Android 4.x ~ 13
RIL Driver	Android 4.x ~ 13
NDIS Driver	Windows 7/8/8.1/10/11
MBIM Driver	Windows 8/8.1/10/11, Linux 3.18~6.3
Gobinet Driver	Linux 2.6/3.x/4.1~4.14
QMI_WWAN Driver	Linux 3.4~6.3

Regulatory & Type Approvals

Regulatory	CE, UKCA, RCM, CB, WEEE
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EMC Emissions & Immunity

Standards	EN 55032:2015+A1:2020 EN 55035:2017+A11:2020 EN 61000-3-3:2013+A1:2019+A2:2021 EN IEC 61000-3-2:2019+A1:2021 EN 301 489-1 V2.2.3 EN 301 489-52 V1.2.1 AS/NZS CISPR 32:2015+A1:2020
ESD	EN 61000-4-2: 2009
Radiated Immunity	EN IEC 61000-4-3: 2020
EFT	EN 61000-4-4: 2012
Surge Immunity (AC Mains Power Port)	EN 61000-4-5: 2014+A1: 2017
CS	EN 61000-4-6: 2014
DIP	EN IEC 61000-4-11:2020

RF

Standards	EN 301 908-1 V15.2.1 EN 301 908-2 V13.1.1 EN 301 908-13 V13.2.1 EN 301 908-25 V15.1.1 AS/CA S042.1:2022 AS/CA S042.4:2022 AS/CA S042.5:2022+A1:2022 FCC Part 22 Draft EN 301 908-25 V15.1.1_0.0.21
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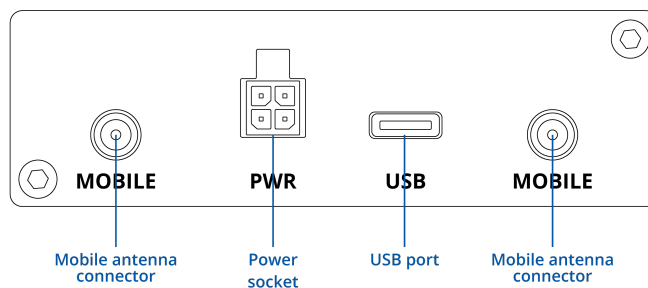
Safety

Standards

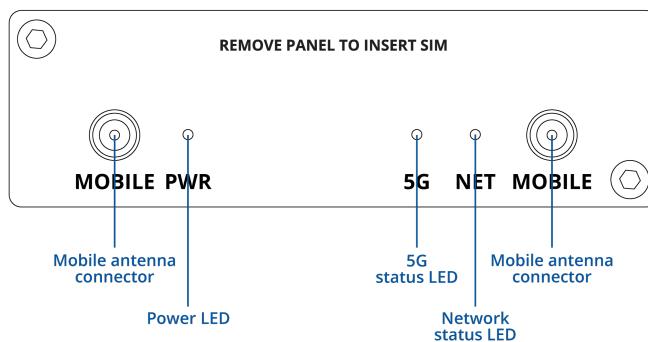
CE: EN IEC 62368-1:2020+A11:2020, EN IEC 62311:2020
RCM: AS/NZS CISPR 32: 2015+A1:2020
CB: EN IEC 62368-1:2020+A11:2020

Hardware

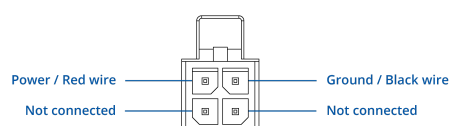
FRONT VIEW



BACK VIEW



POWER SOCKET PINOUT



Ordering

Standard package*



TRM500



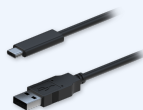
QUICK START GUIDE



9W PSU



4 x 5G MOBILE SMA
ANTENNAS



USB TYPE-C CABLE
(0.8M)



HEX KEY



SIM ADAPTER KIT

*Standard package contents may differ based on standard order codes.

For more information on all available packaging options – please [contact us](#) directly.

Classification codes

HS Code: 851762

HTS: 8517.62.00

For more information on all available packaging options – please [contact us](#) directly.

Available versions

Hardware version	Supported frequencies	Standard order code / Package Contains
TRM500 0***** EMEA ¹ , APAC ² , Brazil	5G NR(SA/NSA): n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n71, n75, n76, n77, n78	TRM500000000 / Standard package with EU PSU
	4G (LTE-FDD): B1, B3, B5, B7, B8, B20, B28, B32, B71	TRM500000200 / Standard package with UK PSU
	4G (LTE-TDD): B38, B40, B41, B42, B43	TRM500000300 / Standard package with AU PSU
	3G: B1, B5, B8	TRM500000400 / Mass packing code

1 - Regional availability - excluding Russia, Belarus & Iran

2 - Excluding China/Japan

The price and lead-times for region (operator) specific versions may vary. For more information please [contact us](#).

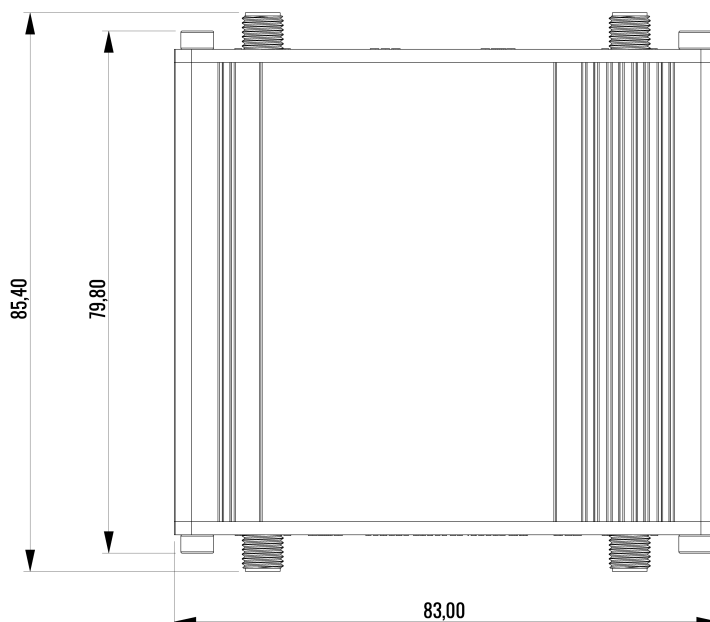
TRM500 spatial measurements

Available versions

Box:	338 x 57 x 171 mm
Device housing (W x H x D)	83 x 25 x 85.4 mm

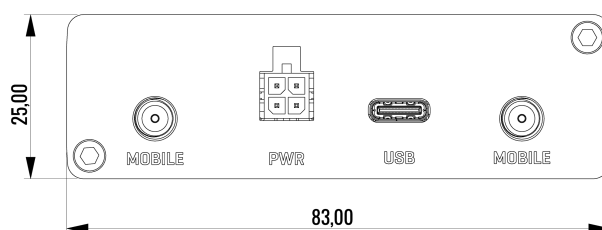
TOP VIEW

The figure below depicts the measurements of device and its components as seen from the top:



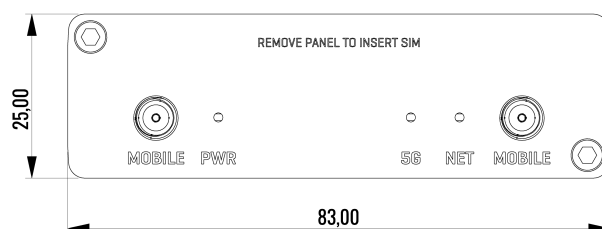
FRONT VIEW

The figure below depicts the measurements of device and its components as seen from the front panel side:



REAR VIEW

The figure below depicts the measurements of device and its components as seen from the back panel side:



MOUNTING SPACE REQUIREMENTS

The figure below depicts an approximation of the device's dimensions when cables and antennas are attached:

