



WRM247 ••••

Intelligent IoT Edge Device

WRM 247LTE is a robust device for remote management, measurement, and control. The device can be used independently or as a part of Internet of Things platform such as IoT-Ticket ®.

Designed by Wapice, it has complete customization opportunities to meet the requirements of industrial conditions. Wapice also provides complete software development services for the target system.

Features

- Data acquisition & remote control
- Cellular & wireless connectivity
- Fieldbus interfaces
- Digital and analog IO
- Update and configure remotely
- Complete, secure solution



	1-Wire		Acceleration
\longleftrightarrow	Bacnet	<u></u>	CANopen
	CANopen		Events
\bigcirc	GPS	↓ ↑	Hardware I/0
\bigcirc	ISOBUS	Modbus-	Modbus-RTU
Modbus TCP	Modbus-TCP	Modbus ASCII	Modbus - ASCII
	NMEA-0183		OBD
{}	Rest Client		Time
\bigotimes	VSE Protocol		Webro Sensor

Interfaces and connectivity

- Cellular (4G/3G/2G)
- WLAN
- WPAN
- Ethernet (2)
- CAN (2)
- RS-485 and RS-232
- 1-Wire
- USB (Host)
- Digital out (4)
- Digital in (4)
- Analog in (2 x mA, 2 x V)

Technical highlights

- IP65, robust metal enclosure
- External antennas
- GNSS
- Accelerometer
- RTC backup battery
- Real-time Linux
- Low-power modes
- Wake-on IO/bus event

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Wapice Software. Electronics. Innovation.





Technical specifications – WRM247^{LTE}

CPU

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Processor	ARM® Cortex™-A5, 536MHz	USB	1 host (max 500 mA)
RAM	512MB DDR2	Digital outputs	4 x 0 / 5-30 V (max 200 r
Flash	256MB NAND	Digital inputs	4 x 0 / 5-30 V
Mem. card	1 Micro SD slot	Analog inputs	2 x 0-22 mA

CELLULAR (GLOBAL)

Technologies	LTE Cat 4, 3G, 2G
LTE FDD	Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 26, 28, 66
LTE TDD	Bands 38, 40, 41
UMTS	Bands 1, 2, 3, 4, 5, 6, 8, 19
GSM	850, 900, 1800, 1900 MHz
Datarates	10 Mbps (Uplink)
(Max/LTE C.1)	5 Mbps (Downlink)
Antenna	External antenna (Main + Div)

WLAN

Standards	IEEE 802.11 b/g/n
TX power	+17.5 dBm,11 Mbps (typical)
Sensitivity	-88 dBm, 8% PER, 11 Mbps (typical)
Security	WEP, WPA/WPA2, WMM/ WMM-PS/WMM-SA, WAPI

WPAN TX power

+8.5 dBm

LOCATION TRACKING

GNSS	GPS L1, GLONASS, BeiDou & Galileo
Accelerometer	Digital, triaxial, 16 bit, ±2g/±4g/±8g/±16g

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Ethernet	2 pcs, 10/100 Mbps (4-pin M12 industrial Ethernet connectors)
CAN	2 pcs
RS-485	1 pc w/ 5V output (max 100 mA)
RS-232	1 pc

1-Wire	1 pc (max 500 mA)
USB	1 host (max 500 mA)
Digital outputs	4 x 0 / 5-30 V (max 200 mA)
Digital inputs	4 x 0 / 5-30 V
Analog inputs	2 x 0-22 mA
	2 x 0-30 V
	(4-20 mA current loop compatible)
LEDs	4 pcs (1 red/green, programmable, GSM, 2 x Eth)

POWER SUPPLY

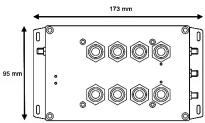
Input range	7- 56 Vdc
	RTC backup battery

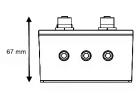
-30°C to +60°C

TEMPERATURE

Operating range

ENCLOSURE





Protection Material Dimensions Weight Connectors IP65 (dust and water protected) Cast aluminum. 173 x 95 x 67 mm (exl. antennas) 615 g Phoenix SACC-M12 series (FS-5 / MS-8 / MSD-4 for cable assemblies)

CERTIFICATIONS

CE (Europe), FCC (US) RoHS

