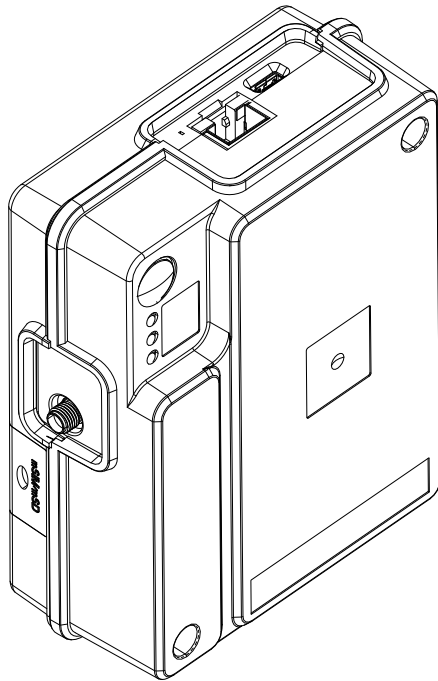
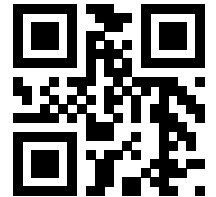




Technical Specification

90028001_1.0



CCD 401

Notes

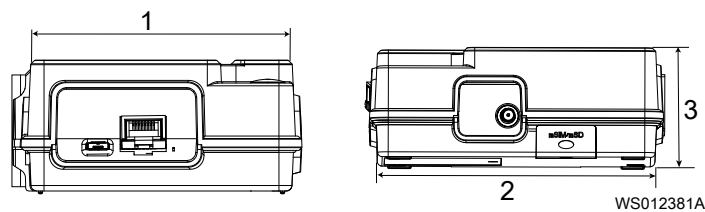
- The modem is designed to be used with Xylem Cloud Services only and not as a stand-alone modem.
- Xylem reserves the right to remotely upgrade the software and configuration files in the modem. It is the Purchaser's responsibility to ensure that the modem is connected at all times to enable such upgrades.
- Xylem aims to provide mobile coverage where the modem is marketed but there is no guarantee from Xylem or obligation to ensure that cellular coverage exists in the Purchaser's location. It is the sole responsibility of the Purchaser to ensure adequate coverage in order for the modem to function properly at all times.
- The modem is delivered with a built-in SIM card. Xylem has roaming agreements with selected operators depending on geography, enabling the modem to transmit data. Xylem reserves the right to change these operators. This might have an effect on the connectivity of the modem. It is the responsibility of the Purchaser to ensure adequate connection of the modem at all times.
- It is the responsibility of the Purchaser to ensure that the modem fulfills the mobile standards in the location. This includes upgrading to a new modem if standards change over time, at Purchaser's sole cost.

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1 Technical Reference

1.1 Dimensions



Part	Dimension
1	101 mm (4.0 in)
2	127 mm (5.0 in)
3	46 mm (1.8 in)

1.2 Environmental requirements

Feature	Value
Operating temperature	-30°C to +55°C (-22°F to +131°F)
Storage temperature	-50°C to +85°C (122°F to +185°F)
Operating humidity	95% relative humidity, non-condensing

1.3 Material

- Plastic, blend of polycarbonate (PC) and acrylonitrile butadiene styrene (ABS)

1.4 Electrical data

Feature	Description
Supply voltage	24 VDC
Current	Maximum 200 mA at 24 VDC
Degree of protection of enclosure	IP40

1.5 Radio data

The unit has a radio modem that supports the following bands:

CCD 401 version	Network (Frequency/band)
CE (European version)	LTE Cat 1 bands 3, 7, and 20 GPRS 900/1800 MHz Fallback
NA (North America version)	LTE Cat 1 bands 2, 4, and 12

1.6 Terminals

E01	E02	GND	A ⁴⁸⁵	B	E06	E07	GND	E09	E10	D11	D12	GND	D13	D14
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
DC+	DC-	GND	TX ²³²	RX	E21	GND	⚡	E24	+24	E26	E27	GND	A12	A11

WS012383A

Terminal	Description
E01	Not used
E02	Not used
GND	Signal ground
485 A	RS-485, 120 ohm termination resistor, A
485 B	RS-485, 120 ohm termination resistor, B
E06	Not used
E07	Not used
GND	Signal ground
E09	Not used
E10	Not used
DI1	Digital input 1, Pull up input
DI2	Digital input 2, Pull up input
GND	Signal ground
DI3	Digital input 3, Pull up input
DI4	Digital input 4, Pull up input
DC+	Input power, +24 VDC
DC-	Input power, ground (earth)
GND	Signal ground
232 TX	RS-232, Tx, RTU Rx
232 RX	RS-232, Rx, RTU Tx
E21	Not used
GND	Signal ground
	Signal ground (chassis ground)
E24	Not used
+24	+24 VDC supply, maximum 50 mA
E26	Not used
E27	Not used
GND	Signal ground
AI2	Analog input 2, 4-20 mA
AI1	Analog input 1, 4-20 mA

Antenna

- SMA connector
- Maximum 4 m (13.1 ft) cable
- Torque 0.56 Nm (0.41 lb.ft)

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com



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The original instruction is in English. All non-English instructions are translations of the original instruction.

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