

ACR-CV-101N-R-D
RS-485 to NB-IoT battery powered
General specification

Dimensions:	145 x 90 x 55 mm
Weight:	336 g with single battery / 475g with double battery
IP rating	IP65
Mounting	6 fixation points for mounting to the wall, tube or collar
Mounting holes	4x M4 pan screw and 2x oval hole for zip-tie fixation
HS code:	85269200

Operating conditions

Operational temperature:	-30 to +60 °C
Humidity:	0 to 85% RH (non-condensing)

Regulations and certifications

Standard	CE, RoHS
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Device configuration

Local device configuration	Over the cable via ACR-CONFIG and the configuration app
Remote device configuration	Downlink via network
FUOTA support	Yes, over the NB-IoT network
Configuration options	Configuration via LUA scripting interface

NB-IoT

Bands	B1, B3, B5, B8, B20, B28
NB module	SIM 7020E
Supported protocols	UDP
Antenna	External
TX Power	23 dBm
SIM form factor	3FF, chip SIM on demand
Supported NB-IoT features	PSM, eDRX
Maximum payload length	512 B uplink, 1024B downlink*

**might be dependant on the network. Tested with Vodafone network*

RS-485 interface

Communication protocol	Modbus RTU, Modbus ASCII, Profibus DP, IEC 62056, proprietary protocols
Physical layer	RS-485
Device type	Master by default, slave configurable
Communication speed	300 - 115 200 Bd
Maximum connected devices	96 UL
Compatibility	Any device with RS-485 interface
Signals	TX +-, RX +-
Polarization resistors	560 Ohms
Termination resistor	120 Ohms
Functionality	Modbus addressing, two way RS-485 communication, configurable RS-485 interface, RS-485 data receive (slave)
Connector	WAGO 2604 CAGE CLAMP®

Optional auxiliary power supply*

Voltage	12V DC
Connector	WAGO 2604 CAGE CLAMP®

*Version with auxiliary power supply has its own ordering code

Battery specifications

Battery size	D-Cell / double D-Cell
Capacity	19 000 mAh / 38 000 mAh
Self-discharge	<1%
Rechargeable	No
Replacable	Yes
Battery connector	JST-XH 2pin

Packaging

1x RS-485 to NB-IoT converter	1x installation manual
1x Battery	1x NB-IoT 2JW1024 antenna; 4G LTE

Optional accessories

ACR-CONFIG	Configuration cable
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Ordering codes

ACR-CV-101N-R-D	RS-485 to NB-IoT single battery pack
ACR-CV-101N-R-D2	RS-485 to NB-IoT double battery pack
ACR-CV-101N-R12-D	RS-485 to NB-IoT single battery pack with 12V auxiliary power supply
ACR-CV-101N-R12-D2	RS-485 to NB-IoT double battery pack with 12V auxiliary power supply