

**ACR-CV-101N-M-D**
**M-Bus 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 or ACRIOS backend
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*

**M-Bus interface**

Communication protocol	M-Bus EN 13757-3
Physical layer	M-Bus EN 13757-2
Device type	Master
Communication speed	300 - 9600 Bd
Maximum connected devices	5 UL or 7.5 mA
Compatibility	Any meter with M-Bus interface
Functionality	Transparent mode, VIF/DIF filtering, secondary addressing, primary addressing, wildcards, broadcast polling
Connector	WAGO 2604 CAGE CLAMP®

**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 M-Bus 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-M-D	M-Bus to NB-IoT single battery pack
ACR-CV-101N-M-D2	M-Bus to NB-IoT double battery pack