ACR-CV-101NI-W433-D2	wM-Bus 433MHz to NB-IoT with double battery cell, internal NB-IoT antenna and external wM-Bus antenna

General specification	
Dimensions:	145 x 90 x 55 mm
Weight:	475 g with battery
IP rating	IP67
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

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

Regulations and certifications	
Standard	CE, RoHS

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
Can be supplied pre-configured	Yes

NB-IoT	
Bands	B1/B2/B3/B4/B5/B8/B12/B13/B14/B17/B20/B26/B28
NB module	SIM7022
Supported protocols	UDP
Antenna	Internal
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

wM-Bus interface	
Communication protocol	M-Bus EN 13757-4, M-Bus EN 13757-3
Device type	Master
Supported modes	T1 mode / 433 MHz, Sensus BUP, Sontex Radian
Maximum connected devices	800 unique ids in send-once mode
Compatibility	Sensus BUP, Sontex Radian (Supercom)
Typical range	4 to 5 floors (40 meters)
Peak antenna gain	~1.4 dBi
VSWR	~1.8:1
Configuration options	Collection duration in each mode, inter-frame timeout, collecting intervals
Functionality	Device type filtering, ID filtering, transparent wM-Bus bridge, discovery scan, active error reporting, NB-IoT network failure recovery mechanisms, scheduled reading

Battery specifications	
Battery size	D-Cell
Capacity	38 000 mAh
Self-discharge	<1%
Rechargable	No
Replacable by the customer	Yes
Battery connector	JST-XH 2pin
Battery life-time	
5 hour reading, 1x a week	12 years
Packaging	
1x wM-Bus to NB-IoT converter	1x installation manual
1x Battery	1x 433MHz antenna 2JW0315W-433-C675W
Optional accessories	
ACR-CONFIG	Configuration cable
Ordering codes	
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