

ACR-CV-101L-R-D
RS-485 to LoRaWAN battery powered

Mechanical 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
Device configuration	
Local device configuration	Over the cable via ACR-CONFIG and the configuration app
Remote device configuration	Downlink via network
FUOTA support	Yes
Configuration options	Configuration via LUA scripting interface
LoRaWAN	
LoRaWAN specification	1.0.3
Registration method	OTAA by default, ABP configurable
Class	A by default, B and C configurable
Frequency	EU868
TX Power	12.7 dBm
Maximum payload length	51B uplink/downlink and up to 235B uplink/downlink <i>*dependant on the network and spreading factor</i>
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 LoRaWAN converter	1x installation manual
1x Battery	1x LoRaWAN 2JW0315-868-C675 antenna

Optional accessories

ACR-CONFIG	Configuration cable
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Ordering codes

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