



# MBUS Data Loggers for fixed networks



## Application

The Altecnic MBUS Data Loggers are made up of our MBus Metering Gateway 205-3001, combined with an MBus Master from the 205-301 Series, fully assembled and connected in a protective enclosure.

This turn-key solution is used to read up to 512 MBus meters, compile meter data in customised reports and deliver it to a receiving system by a set time schedule and integration protocol via the fixed network

## Technical Specification

### Mechanics

Casing material:	Polystyrene (box) and polycarbonate (transparent door)
Dimensions (w x h x d):	250 x 200 x 122
Protection:	IP55
Weight:	1600 g
Mounting:	Wall mounting

### Electrical connections

Supply voltage:	Screw terminal, cable 0.0 - 2.5 mm <sup>2</sup> 0.5 Nm tightening torque
MBUS master port:	Pin terminal, solid wire Ø 0.6-0.8mm
MBUS slave port 1:	Screw terminal, cable 0.25 - 1.5 mm <sup>2</sup> 0.5 Nm tightening torque
MBUS slave port 2:	Screw terminal, cable 0.25 - 1.5 mm <sup>2</sup> 0.5 Nm tightening torque
USB master port:	Type A
USB slave port:	Type mini B
Network:	RJ45 (ethernet)

### Electrical characteristics

Nominal voltage:	100 to 240V AC (±10%)
Frequency:	50 - 60 Hz
Power consumption - max:	<18 W for solutions without RS232, <40 W for solutions with RS232
Power consumption - nom:	<6 W
Installation category:	CAT 3

### Environmental specification

Operating temperature:	-20°C to 55°C
Operating humidity:	5% to 90%, non-condensing
Operating altitude:	0 to 2000m
Population degree:	Degree 2
Usage environment:	Indoors
Storage temperature:	-40 to 85°C

## Technical Specification Continued

### User Interface

Green LED:	Power
Red LED:	Error
Yellow LED:	205-3001: status Ethernet, 205-301: ongoing MBUS communication
Blue LED:	USB active
Push button:	Factory reset
Configuration:	Web interface (HTTP), auto configuration (URL) Telnet, REST/JSON

### MBUS

Interfaces:	MBUS master, MBUS slave
MBUS standard:	BS EN 13757
Transparent MBUS:	TCP/IP and MBUS 2 wire slave interface (software limit does not apply to Transparent)
Virtual MBUS:	TCP/IP and MBUS 2 wire slave interface
Decryption:	Yes

### Integrated MBUS Master

Nominal voltage, master port:	42 VDC - 205-301 28VDC - 205-3001
MBUS baud rate, master port:	300 and 2400 bit/s
Max number of MBUS devices (software limit):	Software licence for 8, 32, 64, 128, 256 & 512 meters.
MBUS search modes:	Primary, secondary
Max cable length:	1000m (100nF/km, max. 90 ohm)
Max number of unit loads (hardware limit):	8T/12mA - 256T/384 mA

### MBUS Slave Interface

MBUS baud rate, slave port:	300 and 2400 bit/s
Nominal voltage, slave port:	21-42 VDS
Addressing mode:	Primary, secondary

### General

Real time clock backup:	24 hour
Real time clock accuracy:	<2s per day
Script engine:	Intelligent script engine for active content generation
Software / Firmware update:	Web interface
Metering reports:	HTTP, FTP, SMTP (email)
Additions:	Modbus, REST, JSON-RPC & DLMS
Continuous readout mode:	Modbus, REST

### Data Storage (examples) - 15 minute values

1 meter:	15 years, hourly values > 15 years
32 meters:	4 years, hourly values > 15 years
128 meters:	1 year, hourly values ≈ 4 years
256 meters:	0.5 year, hourly values ≈ 2 years
512 meters:	3 months, hourly values ≈ 1 year

### Fixed Network (Ethernet)

Speed and duplex:	Auto 10/100 Mbit half/full duplex
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### Approvals:

EMC	BS EN 61000-6-2, BS EN 61000-6-3
Safety:	BS EN 61010-1, CAT 3

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## MBUS Data Loggers

The Altecnic Data Loggers are made up of the MBUS metering gateway 205-3001, combined with the MBUS extender 205-301 fully assembled and connected in a protective enclosed box.

This turn key solution can be used to read up to 512 MBUS meters, compile meter data into customised reports and deliver to a receiving system by a set time schedule and integration protocol via a fixed network.

## Reference Numbers and Descriptions

Ref No	Description	No of Meters
205-3001	MBUS data logger for fixed network - 8 meters	8
205-3002	MBUS data logger for fixed network - 32 meters	32
205-3003	MBUS data logger for fixed network - 64 meters	64
205-3004	MBUS data logger for fixed network - 128 meters	128
205-3005	MBUS data logger for fixed network - 256 meters	256
205-3006	MBUS data logger for fixed network - 512 meters	512

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The Altecnic logo, featuring the word 'altecnic' in a lowercase, sans-serif font. The letter 'a' is stylized with a green dot above it.