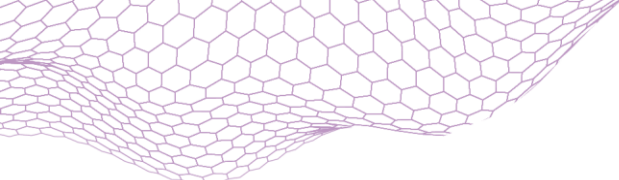


# MBUS TO MODBUS RTU CONVERTER

## DDBPC SERIES





## SYNOPSIS

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- THE MBUS TO MODBUS CONVERTER IS AN INDUSTRIAL-GRADE COMMUNICATION GATEWAY DESIGNED TO ENABLE SEAMLESS INTEGRATION OF M-BUS-BASED UTILITY METERS INTO MODBUS RTU (RS485/RS232) NETWORKS.
- IT SUPPORTS DIRECT TRANSLATION OF MBUS SIGNALS INTO MODBUS FORMAT, ALLOWING VARIOUS UTILITY DEVICES—SUCH AS WATER, GAS, ELECTRICITY, AND HEAT METERS—TO BE EASILY MONITORED AND MANAGED VIA MODBUS-COMPATIBLE SYSTEMS LIKE PLCs, SCADA, AND DATA LOGGERS.

## FEATURES

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- SUPPORTS UP TO 250 MBUS DEVICES, DEPENDING ON MODEL.
- AVAILABLE IN BOTH RS485 AND RS232 MODBUS OUTPUT VERSIONS.
- GALVANIC ISOLATION BETWEEN MBUS AND MODBUS INTERFACES.
- WIDE POWER INPUT RANGE: 12–36 VDC AND 230 VAC.
- DIN RAIL MOUNTABLE, COMPACT FORM FACTOR.
- CONFIGURABLE SHORT CIRCUIT PROTECTION AND RECOVERY FOR MBUS LINE.
- BAUD RATE SELECTABLE FROM 300 TO 38400 BPS.
- DESIGNED FOR INDUSTRIAL, COMMERCIAL, AND RESIDENTIAL METERING APPLICATIONS.

## APPLICATIONS

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- WATER / HEAT / GAS / ELECTRICITY METERING
- BUILDING AUTOMATION AND ENERGY MONITORING
- INDUSTRIAL UTILITY INTEGRATION
- SMART METERING SOLUTIONS

## TECHNICAL SPECIFICATIONS

### MBUS

|                                         |                                             |
|-----------------------------------------|---------------------------------------------|
| <b>M-Bus</b>                            | up to 10 / 50 / 80 / 100 / 250 MBUS devices |
| <b>Baud rate</b>                        | from 300 to 38400 bit/s                     |
| <b>MBUS line power</b>                  | mark 36-40V, space 24-27V                   |
| <b>Adjustment to MBUS loads</b>         | Automatic                                   |
| <b>MBUS short circuit event current</b> | ≥500mA                                      |
| <b>MBUS short circuit reaction time</b> | Configurable, 1-4s.                         |
| <b>Recover after short connection</b>   | Configurable, 10-60s.                       |

### SERIAL INTERFACE

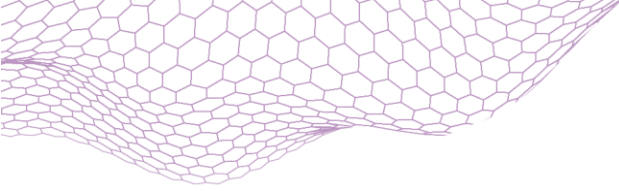
|                  |                         |
|------------------|-------------------------|
| <b>Port Type</b> | RS-485/ RS-232 * 1 Port |
| <b>Connector</b> | Terminal Block          |
| <b>Speed</b>     | from 300 to 38400 bit/s |
| <b>Parity</b>    | None, Odd, even         |
| <b>Data Bit</b>  | 7, 8                    |
| <b>Stop Bit</b>  | 1                       |
| <b>RS-485</b>    | Data+, Data-            |

### POWER

|                                |                                                                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Operating Voltage</b>       | 12-36 V DC<br>230 V AC                                                                                                                        |
| <b>Power Consumption</b>       | not loaded up to 3,5W, fully loaded up to 20W                                                                                                 |
| <b>Over-voltage protection</b> | >1000V                                                                                                                                        |
| <b>LED</b>                     | Offline: MBUS not loaded (ON), Overload: MBUS short connection, operating: MBUS power (ON/Off), TX: MBUS data transfer. RX: MBUS data receive |

### ENVIRONMENTAL

|                              |                         |
|------------------------------|-------------------------|
| <b>Operating Temperature</b> | -25 to +60 C            |
| <b>Storage Temperature</b>   | -40 to +60 C            |
| <b>Humidity</b>              | 5 – 95%, non-condensing |



## MECHANICAL

|                 |                              |
|-----------------|------------------------------|
| Dimension       | 105 * 75 * 45 mm (W * D * H) |
| Weight          | 175 g                        |
| Protection type | IP20                         |
| Mounting        | DIN rail                     |

## ORDERING CODE

DDBPC MBUS MRTU XX YYY A/D V

|           |                                             |
|-----------|---------------------------------------------|
| DDBPC     | Databridge Dynamic BMS Protocol Converter   |
| MBUS MRTU | MBUS to Modbus RTU                          |
| XX        | Number Of MBUS Meters: 10, 50, 80, 100, 250 |
| YYY       | RS232/ RS485                                |
| A/D       | A: 230 V AC<br>D: 12-36 V DC                |
| V         | Fixed                                       |

DATA BRIDGE  
D Y N A M I C