

**Versatronik® 522 & 522D
OT/Modbus
Communication Gateway**

120VAC Wall-mount 704054
24VAC DIN-rail mount 704077



Effective Date: March, 2013

Product Overview

The Versatronik® 522 & 522D OT/Modbus gateway provides a communication translation between OpenTherm enabled boilers

and a MODBUS (RS-485) enabled BMS system.

Available in both 120VAC metal enclosures as well as a 24VAC DIN rail mounted housing.

Both read and read/write points allow information to be read from OT device as well as being written to it to allow operational changes to be made by the BMS.

Detail

Gateway allows programming of control method for Temperature Set Point control as well as Modulation control.

Ability to program for Celsius or Fahrenheit temperature based on setting of address.

Discrete inputs are available from addresses 00009 to 00022 based on current programming.

Analog Input Registers are available from address 40001 to 40014 covering boiler temperature set point, DHW set point as well as a number of other points.

Please note that these features are a function of boiler control manufacturer programming.

Please refer to the technical instruction manual of your

boiler control for a complete list of points available for each control.

Specifications

Electrical:

120VAC Wall-mount or
24VAC DIN-rail mount

Power Requirements:

120VAC Wall-mount:
MAX 7.5W
24VAC DIN-rail mount:
MAX 12W

Recommendations:

Avoid running wires beside or near high voltage 120/240VAC conductors. If proximity to high voltage conductors cannot be avoided, use stranded, twisted pair of shield design wire. Ensure that only one end of the shielding is grounded.

Appearance and Weight:

120V Wall-mount:
Mounting style: Wall
(field-supplied screws)

Supply Voltage: 120VAC
(power cord supplied)

Dimensions
8" X 6.5" X 1.75"
(200 X 165 X 45 mm)

Weight: 3.55 lbs (1.6 Kg)

Appearance: galvanized steel base with white metal cover

24VAC DIN-rail mount:

Mounting style: DIN-rail
Supply Voltage: 24VAC
(power supply not included)

Dimensions:
6.25" X 3.5" X 2.25"
(160 X 90 X 60 mm)
Weight: 0.5 lbs (225 Grams)

Appearance: tan-coloured enclosure

Currently Supported Devices:

- Viessmann Vitodens 100, WB1A
- Viessmann Vitodens 100, WB2A
- OT Enabled Boilers

KWE PN 394035 Versatronik® 522 OT/Modbus Communication Gateway V1.0 March 2013 Technical information subject to change without notice.

Additional Information

Surroundings:

Mount 120VAC gateway in a convenient location near the connected boiler control.

Mount 24VAC gateway onto DIN-rail within an enclosure in a convenient location near the boiler control.

Terminals:

- Two wire Modbus connections

External Diagnostics:

- Flashing LED fault diagnostic

Programming:

Setting registers

Networks:

- Modbus

Wiring:

- Modbus RS-485 Network COM1 terminals A and B are used.

Protocols:

- Modbus to BMS controls.
- OT communication to boiler

Agency Compliances:

The 120VAC wall-mount unit is CSA compliant.

Trademark Information

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Modbus Communication

Configuration Settings

The gateway is a Modbus slave and all communication has to be initiated by a master. To set up successful communication with the gateway all connection parameters have to be set correctly to the following: 9600 8-N-1 RTU.

Mode	RTU
Baud Rate	9600bps
Data Bits/Length	8
Parity	None
Stop bits	1
Address/Device ID	88, 1-9

NOTE: We reserve the right to make technical changes designed to improve our products without prior notice.

