

QUICK GUIDE

EE650 - Air Velocity Transmitters with RS485 Interface

(Full User's Guide at www.epluse.com/EE650)

Hardware

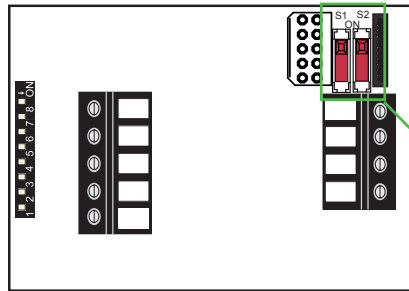
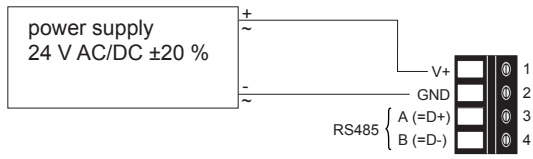
The bus termination shall be realized with 120 Ohm resistor, switch on the board.

Very important:

For proper function the power supply must be strong enough to ensure supply voltage within the specified range (see technical data) at any time and at all devices in the bus. This is particularly relevant when using long and thin cables which can cause high voltage drop; please note that a single EE650 requires peak current of 150 mA.

Wiring

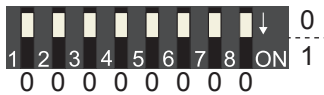
Digital interface



S1: Response time t_{90}
 ON: slow
 OFF: fast
S2: Termination resistor
 120 Ohm
 ON/OFF

Address Setting

Address Switch



Address setting via EE-PCS Product Configuration Software:

All Dip-Switches at position 0 → address has to be set via Product Configuration Software

Modbus (Slave device): factory setting EE650: 65 (permitted values: 1...247).

BACnet (Master device): factory setting EE650: 65 (permitted values: 0...127).

Example: Slave address is set via configuration software.

Address Switch



Address setting via Dip-Switch:

Modbus (Slave device): Setting the Dip-Switch to any other address than 0, overrules the slave address set via configuration software (permitted values: 1...247).

BACnet (Master device): Setting the Dip-Switch to any other address than 0, overrules the slave address set via configuration software.

BACnet Note: permitted values are 0...127. The 8th bit of the Dip-Switch is ignored (ID 127 = 0111 111).

To set address 0 via Dip-Switch, the 8th bit shall be set to 1 (ID 0 = 1000 0000).

Example: Slave address set to 11 (= 0000 1011 binary).

BACnet Setup

Please see PICS (Product Implementation Conformance Statement) - available on www.epluse.com

Modbus Setup

FLOAT (read register):

| Function code / Register number ¹⁾ [Dec] | Register address ²⁾ [HEX] | Parameter name | |
|---|--------------------------------------|----------------|----------|
| 31003 | 0x03EA | Temperature | [°C] |
| 31005 | 0x03EC | Temperature | [°F] |
| 31041 | 0x0410 | Airflow | [m/s] |
| 31043 | 0x0412 | Airflow | [ft/min] |

SHORT (read register)³⁾:

| Function code / Register number ¹⁾ [Dec] | Register address ²⁾ [HEX] | Parameter name | |
|---|--------------------------------------|----------------|----------|
| 34002 | 0x0FA1 | Temperature* | [°C] |
| 34003 | 0x0FA2 | Temperature** | [°F] |
| 34021 | 0x0FB4 | Airflow* | [m/s] |
| 34022 | 0x0FB5 | Airflow*** | [ft/min] |

* Values are stored with the scale 1:100 (e.g.: 2550 is equivalent to 25.5 °C)

** Values are stored with the scale 1:50 (e.g.: 2550 is equivalent to 51 °F)

*** Values are stored with the scale 1:1

INFO (read register):

| Function code / Register number ¹⁾ [Dec] | Register address ²⁾ [HEX] | Parameter name |
|---|--------------------------------------|--------------------------|
| 30001 | 0x00 | Serial number (as ASCII) |
| 30009 | 0x08 | Firmware version |

INTEGER (write register):

| Function code / Register number ¹⁾ [Dec] | Register address ²⁾ [HEX] | Parameter name |
|---|--------------------------------------|--|
| 60001 | 0x00 | Slave-ID* (modbus address) |
| 60002 | 0x01 | Modbus protocol settings ³⁾ |

* If the ID is set via DIP-Switch the response will be NAK.

1) Register number starts from 1

2) Register address starts from 0

3) For Modbus protocol setting please see Application Note Modbus (www.epluse.com)

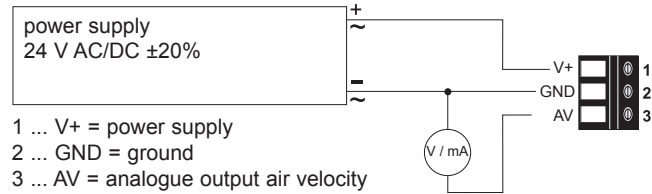
QUICK GUIDE

EE650 - Air Velocity Transmitter with Analogue Output

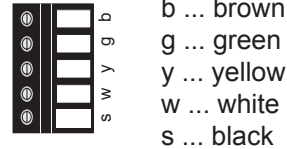
(Full User's Guide at www.epluse.com/EE650)

Wiring

Supply / Output



remote probe

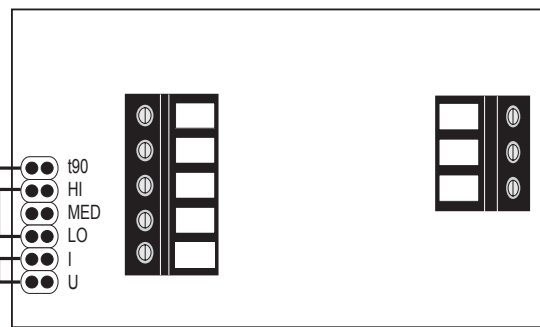


Jumper

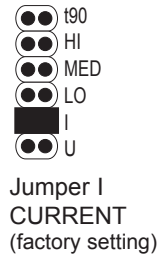
Selection of the response time t_{90}

Selection of the working range

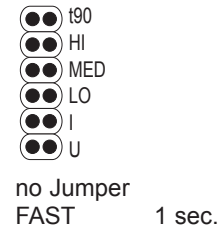
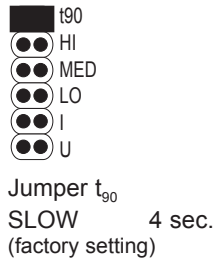
Selection of the output



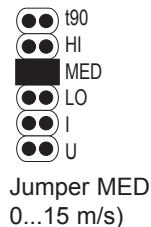
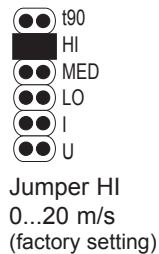
Selection of the output



Selection of the response time t_{90}



Selection of the working range



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