

ELECTRICAL CONNECTIONS

2008-09-03

Vaisala PTB210 series digital barometers

Supply voltage:	528 VDC reverse polarity protected (see below)
Analog outputs:	05 VDC or 02,5 VDC
Serial outputs:	RS232C, RS232C /TTL (optional), RS485, non isolated (optional)
Pressure measurement ranges:	Different scalings between 5001300hPa (analog output),
_	50 1100 hPa, 501300 hPa (digital outputs)
Operating temperature range:	-40+60°C
Operating humidity range:	Non-condensing

Connections

There are three different serial output interfaces available with the PTB210 digital barometers: RS232C, RS485/232C, and RS232C/TTL. The connections depend on the output protocol in use. In following tables there are presented the connections of these output interfaces

Wire color	Signal
Grey	RX
Green	TX
Blue	Ground
Pink	Supply voltage (528 VDC)
Brown	not connected
White	not connected
Yellow	External power control (TTL level: 1 = off, 0 = on)

Connections of the PTB210 barometer with RS232C interface.

Wire color	Signal
Grey	RX
Green	TX
Blue	Ground
Pink	Supply voltage (818 VDC)
Brown	RS485 -
White	RS485 +
Yellow	External power control (TTL level: 1 = off, 0 = on)

Connections of the PTB210 barometer with RS485/RS232C interface

Connections of the PTB210 barometer with RS232C/TTL interface

Wire color	Signal
Grey	RX
Green	TX
Blue	Ground
Pink	Supply voltage (528 VDC)
Brown	RXD (TTL level)
White	TXD (TTL level)
Yellow	External power control (TTL level: 1 = off, 0 = on)

The two output protocols cannot be used simultaneously. Connect either RX/TX or RXD/TXD wires. It is recommended to isolate the free wire ends.