



O42 - Expansion I/O Board

Communication interface for automations with 24VDC general purpose I/O signals

Description

The addition of an expansion board allows the installation of a new 26-pin AUX connector on the back panel of a ForTest M-Series or T-Series instrument that joins the already existing 10-pin connector to perform GPIO functions.

This connector provides up to 8 outputs and up to 8 additional inputs compared to the AUX connector.

To do this, the instrument is fitted with an expansion board (on which there may be other components and options) on which there is a 26-pin male connector marked AUX2, which is then positioned on the rear panel of the instrument.

Below is a figure for the numerical positioning of the connector pins and table with the connector pinout marked with the acronym AUX2.

	AUX2	
Pin	Description	Kind of signal
1	OUT0- RUNNING TEST A	Output
2	OUT1- REJECT A	Output
3	OUT2- GOOD A	Output
4	OUT3- RUNNING TEST B	Output
5	OUT4- REJECT B	Output
6	OUT5- GOOD B	Output
7	OUT6- DISCHARGE A	Output
8	OUT7- DISCHARGE B	Output
9	GND	GND Outputs
10	ING0-START A	Input
11	ING1-ABORT A	Input
12	ING2-START B	Input
13	ING3-ABORT B	Input
14	BCD5-START 5	Input
15	BCD6-START 6	Input
16	BCD7-START 7	Input
17	BCD8-START 8	Input
18	GND	GND Outputs
19	ANT_EXP	Remote control Radio
20	GND	GND Outputs
21	GND	GND Outputs
22	GND	GND Outputs
23	GND	GND Outputs
24	DAC OUTAN 1	Analog Output DAC
25	DAC OUTAN 0	Analog Output DAC
26	GND DAC OUTAN0-OUTAN1	GND DAC



All input signals are active at 24 Vdc.

To activate an input, it is therefore necessary to supply a 24Vdc voltage (present for example on pin 15 of the AUX1 connector) to the desired input. This voltage must be supplied with an impulse of at least 100ms duration. Once this impulse has been supplied, the input must be disconnected from the power supply before it can be activated a second time.

All output signals are active at 24 Vdc compared to the GND supplied to pins 9-18-20-21-22-23.

The **RUNNING TEST** signal identifies the status of the instrument, distinguishing it between a test in progress or a test not in progress.

The **REJECT** signal identifies the result of the last test carried out by the instrument after it was switched on.

The **GOOD** signal identifies the successful outcome of the last test performed by the instrument after it was switched on.

The **DISCHARGE** signal identifies whether the instrument is discharging air at the end of the test.

The duration of these signals will depend on how the **SETUP** parameter "Duration of the label signal" is set.

Technical code

The field defining the Profinet option is located in position 42 of the technical code.