

Transmitter

FEATURES

- Analog output ± 10 VDC, 0-20 VDC or 4-20 mA
- Serial communications: RS-485, MODBUS RTU protocol
- 24-bit internal resolution
- Relay outputs
- Digital inputs
- Compact DIN rail mounting
- CE compliant

DESCRIPTION

AST 5P is a DIN rail mounted, high performance transmitter designed for applications with strain gauge transducers. It converts the output from connected loadcells into a very stable signal suitable for PC or PLC based control systems

AST 5P is typically used where a local display is essential either for displaying data or for front panel set-up. The set-up and calibration procedure is easily performed either from the front panel or by using the deltaCOM programme via a standard PC running under Windows. All set-up data can be stored in the host computer and downloaded in case of replacement of the transmitter with PC software deltaCOM.

The transmitter is fitted with two relay outputs having a response time of less than 20 ms. for use in high precision level control applications.

A high accuracy A/D converter, of high resolution and stability, serves as the heart of the transmitter.

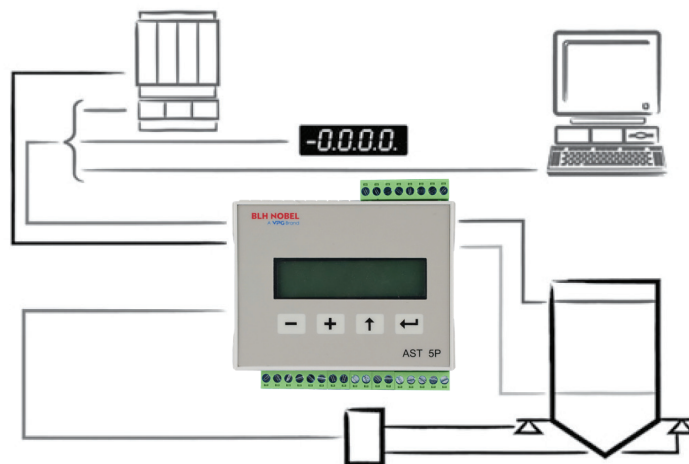


This advanced technology provides both analogue and serial outputs which can be conditioned to give the user accurate, stable and rapid response measurement information.

The AST 5P is compatible with other instruments in the BLH Nobel program and can communicate via standard RS-485/MODBUS RTU protocol with a common process control host – PC/PLC.

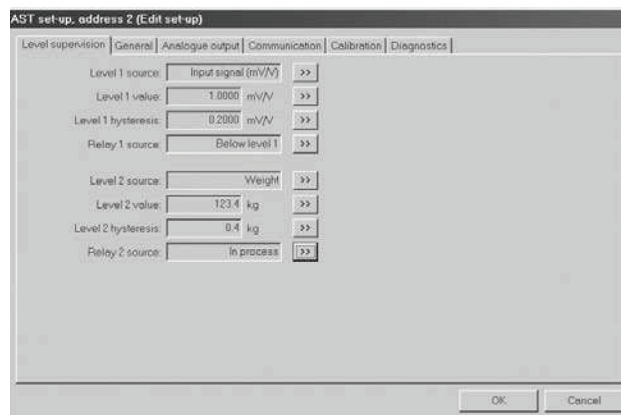
The transmitter is CE marked, fully compliant with all requirements.

CONFIGURATION



SPECIFICATIONS			
PARAMETER	VALUE	PARAMETER	VALUE
PERFORMANCE		DIGITAL INPUTS	
Resolution	24 bits	Inputs	2 pcs
Full Scale Range	± 3.3 mV/V	Type and Load	24 VDC, 6 mA
Non-Linearity	<0.005% of used range	RELAY OUTPUTS	
Excitation Voltage	10V	Number	2 pcs (each with 1 switching group)
No. of 350 Ω load cells	Up to 8 pcs	Load	max. 1 A, 30 VAC or VDC
Filter	0.05 to 100 Hz,	COMMUNICATION INTERFACE	
Offset, drift	<0.0002 % of 3.3mV/V/°C	Interface	RS-485 (two-wires or four-wires), isolated 500 V
Gain drift	<0.0015% of full scale	Protocol	MODBUS RTU or ASCII
Calibration Methods	Data sheet, table, dead weight	Baud Rate	Up to 115.2 kbaud
ENVIRONMENTAL		Function	For control communication (MOD- BUS RTU) or external display (ASCII)
Operating Tempera- ture	-10 to +50°C	MECHANICAL DATA	
Storage Temperature	-25 to +80°C	Dimensions	75 × 100 × 110 mm (H × W × D)
Relative Humidity	95%	Standard Mounting	DIN EN 60715 TH35 (35 mm)
IP Level	IP20	Connector Type	Plug-in screw terminals
FRONT PANEL			
Display Type and Size	2 × 6 character LCD display with backlight		
Keyboard	4 buttons for menu control and data entry		
POWER SUPPLY			
Voltage	24 VDC $\pm 20\%$		
Power Consumption	6 W		
Isolation	Digital inputs common with power supply. Other parts -500 V		
ANALOG OUTPUT			
Type	16-Bit Current/Voltage Output DAC		
Non-Linearity	<0.01% of full scale		
Gain Drift	<0.003% of full scale/°C		
Filter	0.05 to 100 Hz, type FIR, selectable bandwidth		
Voltage	0-10 or ± 10 VDC		
Load Data	min. 1k Ω		
Offset Drift	<0.003% of actual value/°C		
Current	0 to 20 mA, ± 20 mA, 4 to 20 mA or -12 to 20 mA		
Load Data	max. 500 Ω		
Offset Drift	<0.7 μ A/°C		

Subject to change without notice.



Setup Example

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