

Electronic Trip Amplifier

UAS3 Series

Features

- ▶ Integrated trip amplifier
- ▶ 12-bit analog-digital converter
- ▶ For pressure, temperature, level and flow
- ▶ Monitors and controls any sensor with analog output
- ▶ Ideal companion to our 400-series pressure transducers
- ▶ Four switchpoints in a single, compact unit
- ▶ Easy-to-read LCD display with scalable bar graph
- ▶ UL/CSA approved

Applications

- ▶ OEM-applications in hydraulics and pneumatics
- ▶ Test bench
- ▶ Industrial machinery

General Specifications*

Accuracy:	0.2% f. s.
Linearity Error:	±0.2% f. s. at 77°F (25°C)
Repeatability:	±0.01% f. s.
Material: Housing (Electronics): Seal (Housing): Keypad:	Cast aluminum Neoprene® Polyester film
Measuring Ranges:	(free scalable): -9999 to +9999
Measuring Principle:	Amplifier with 12 Bit A/D-converter
Electrical Connection:	Plug-in, terminal strip with 14 slots for 1.5mm ² , 14 AWG slots
Sensor Connection:	Plug 3-pin acc. to DIN 43650 / meter including electrical plug with molded cable
Cable Gland:	1 x PG 13.5 side entry - standard
Power Supply:	18 - 30 VDC, reversed polarity protected
Power Consumption:	appr. 350 mA at Ub = 24 VDC (without load)
A/D-Converter: Resolution: Scanning Rate:	12 bit (4096 steps per measuring span) 1000 / s
Analog Inputs: Current Input: Voltage Input: Resistance Input: Temperature:	4 - 20 mA 0 - 10 VDC 0.5 - 100 kOhm PT100 element acc. to IEC751
Analog Output: Current Output: Load: Load Influence: Scanning Rate:	4-20 mA max. RI = (Ub-12 V) / 20 mA RI = 600 Ohm at Ub = 24 VDC 0.3% / 100 Ohm 1 ms

* See product configurator for additional options.



Analog Output (Cont.): Voltage Output: Rating: Adjustment Range:	0 - 10 V DC max. 10 mA, short circuit-proof 25% to 100% f. s.
Switching Output(s): Contact Rating: Cycles: Switching Rate: Delay: Operation Time: Status Display:	max. 120 VDC / 250 VAC max. 120 W / 1250 VA 1 million at 24 VDC / 2 A max. 20 / s 0 - 9.9 s adjustable 1 mS S1 to S4 on LCD display
Digital Display: Bar Graph: Display Range: Display Rate: Display Unit:	8-digit 14-segment LCD display, height 1/2 in (12 mm) 20-segment -9999 to +9999 (scalable) 4/S psi / bar / kPa / °C / °F
Operating Elements:	Keypad with easy response push buttons
Temperature Range: Electronics: Storage:	14° to 158°F (-10 °C to + 70 °C) -22° to 176° F (-30°C to + 80°C)
Temperature Influence:	±0.05% f. s. / 10K
Compensation Range:	14° to 158°F (-10° to +70°C)
Protection Class:	IP65
Dimensions (Housing):	3-15/16 W X 5-5/16 H X 3-3/16 D (100 W X 135 H X 80 D)
Additional Features:	8-digit 14-segment LCD display with bargraph and trend indication, microcontroller-controlled, self monitoring, all parameters are configured by keypad, selective keypad lock, high accuracy, quick scanning rate (1 ms).
Weight:	appr. 2 lb (1080 g)

Technical Drawings

Electrical Connection

Switch-cont. S4 S3 S2 S1

14 13 12 11 10 9 8 7 6 5 4 3 2 1

S4 S3 S2 S1

Earth

Analog Output
Analog GND (0 V)
4 - 20 mA (0 - 10 V)
Power Supply
OV
+18 V DC - +30 V DC

Sensor Connection acc. to DIN 43650

1 = +Ub
2 = -Ub (*)
3 = Signal

1 gn
2 bn
3 ws

Signal
-Ub
+Ub

UL US

Analog measuring input
By choice:
Current input : 4 - 20 mA
Voltage input : 0 - 10 V DC
Resistance input : Poti (500 Ohm - 100 Kohm)

COVER IS 180° REVERSIBLE

5-3/8 (135)

3-7/16 (87)

4-3/8 (110)

3-1/8 (80)

Product Configurator

Example UAS3 -5 -6

Base Model

UAS3

Input Options

-5	4-20 mA analog input
-6	0-10 VDC analog input

Output Options

-4	Four switchpoints with no analog output
-5	Four switchpoints with 4-20 mA analog output
-6	Four switchpoints with 0-10 VDC analog output