

# Electronic Display

## Type UAS7

Trip amplifier for all physical quantities with digital display,  
2 switching outputs and  
1 analog output,  
Linearity error 0.2 % f. s.

### Features

4-digit 7-segment LED display, microprocessor-controlled, self monitoring, all parameters are configured by Keypad, display unit selectable, adjustable keypad lock, high accuracy, quick scanning rate (1 ms)

### Display range

freely scalable: -9,999...+9,999

### Applications

OEM applications,  
Hydraulics and pneumatics,  
test bed and apparatus engineering,  
heavy industry

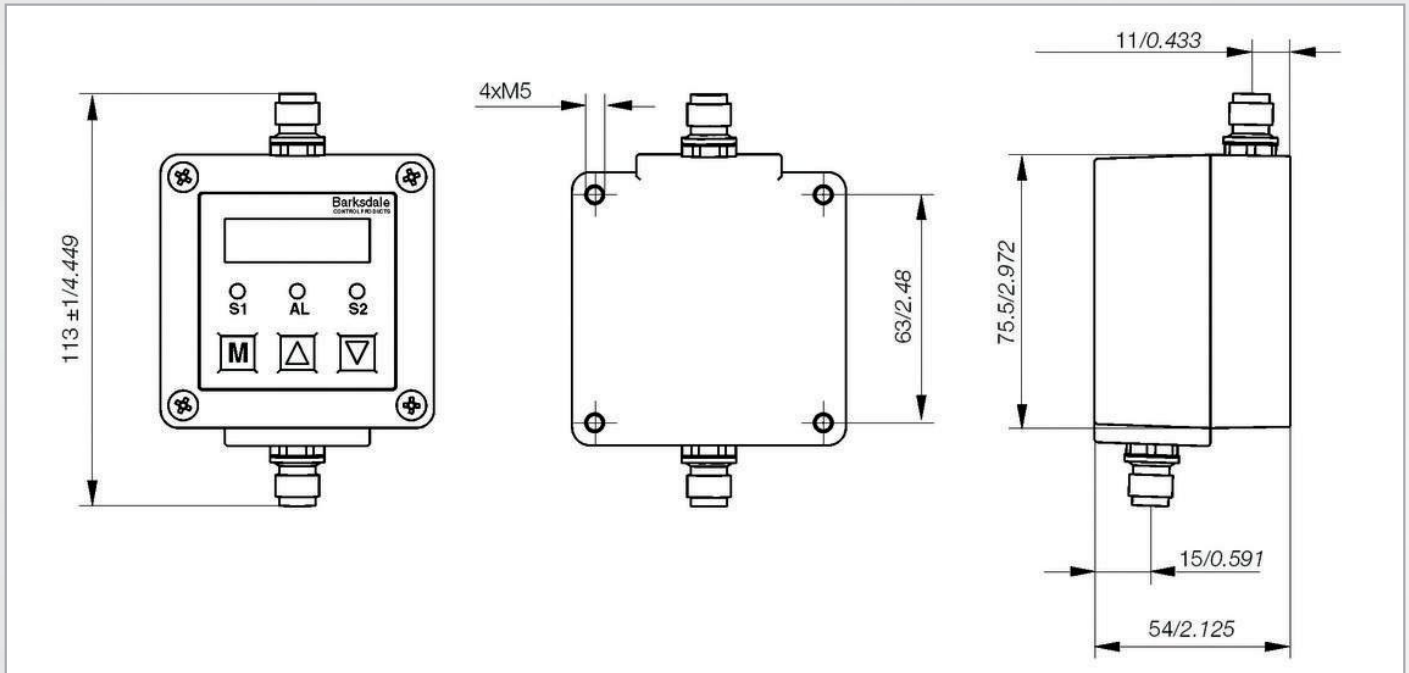


### Technical Data

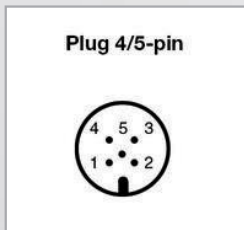
<b>Measuring principle:</b>	Amplifier with 10 bit A/D converter
<b>Materials:</b>	
Electronics housing:	Aluminum die-cast
Housing seal:	NBR
Keypad:	Polyester
<b>Operating elements:</b>	Keypad with easy-response pushbuttons
<b>Protection system/class</b>	IP65 / III
<b>Dimensions:</b>	75 x 75 x 55 mm (W x H x D)
<b>Weight:</b>	approx. 330 g
<b>Analog measuring inputs:</b>	
Current input:	4... 20 mA
Voltage input:	0... 10 V DC
<b>Linearity error:</b>	< ±0.2 % v. f. s. at 25 °C
<b>A/D converter:</b>	
Resolution:	10 bit (1024 steps per measuring span)
Scanning rate:	200 / s
<b>On-status display:</b>	4-digit 7-segment LED display, red, digit height 10 mm
Display range:	-9,999... +9,999
Display rate:	2 / s
Display unit:	all technical units
<b>Sensor connection:</b>	Plug M12 x 1, 4-pin
<b>Electrical connection:</b>	Plug M12 x 1, 4-pin or 5-pin

<b>Temperature influence:</b>	< 0.05 % v. f. s. / 10K
<b>Compensation range:</b>	-10 °C... +70 °C
<b>Repeatability:</b>	≤±0.05 % v. f. s.
<b>Temperature range:</b>	
Electronics:	-10 °C... +70 °C
Storage:	-30 °C... +80 °C
<b>Power supply:</b>	15... 32 V DC, reversed polarity protected (SELV, PELV)
<b>Power consumption:</b>	approx. 50 mA (without load)
<b>Analog output:</b>	
Current output:	4...20 mA
Load:	max. RI = (Ub-12 V) / 20 mA RI = 600 Ohm at Ub = 24 V DC
Load influence:	0.3 % / 100 Ohm
Scanning rate:	5 ms
Voltage output:	0...10 V DC
Rating:	max. 10 mA
Adjustment range:	25 %... 100 % f. s.
<b>Transistor switching outputs PNP:</b>	
Switching function:	Normally open / normally closed, standard / window mode and diagnosis function adjustable
Adjustment range:	0 %... 125 % f. s.
Switching frequency:	max. 100 Hz
Current rating:	max. 500 mA, short-circuit proof
Delay:	0.0 s ... 9.9 s adjustable
Status display(s):	LED(s) green
<b>Accessories:</b>	Plug connector

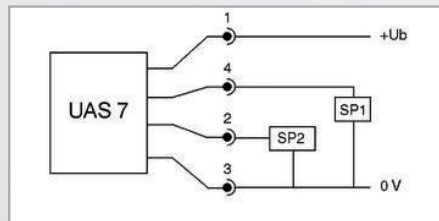
### Dimensions (mm / inch)



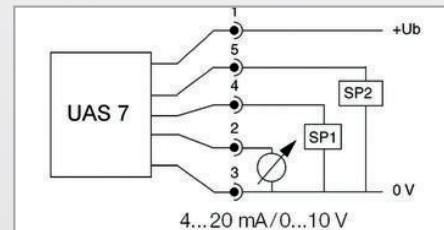
### Plug



### Connection Diagram 1



### Connection Diagram 2



### Sensor

**M12 x 1**

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

**Analog measuring input**

Optional:  
Current input:  $4 \dots 20 \text{ mA}$   
Voltage input:  $0 \dots 10 \text{ V DC}$

(\*) Pin 2 is not needed with 2-wire connection.

### Order Numbers

Electronic trip amplifier with 2 PNP outputs		
Analog Input	Analog Output	Order Number
$4 \dots 20 \text{ mA}$	---	0001-004
$4 \dots 20 \text{ mA}$	$4 \dots 20 \text{ mA}$	0001-002
$4 \dots 20 \text{ mA}$	$0 \dots 10 \text{ V}$	0001-003
$0 \dots 10 \text{ V}$	---	0001-007
$0 \dots 10 \text{ V}$	$4 \dots 20 \text{ mA}$	0001-005
$0 \dots 10 \text{ V}$	$0 \dots 10 \text{ V}$	0001-006