

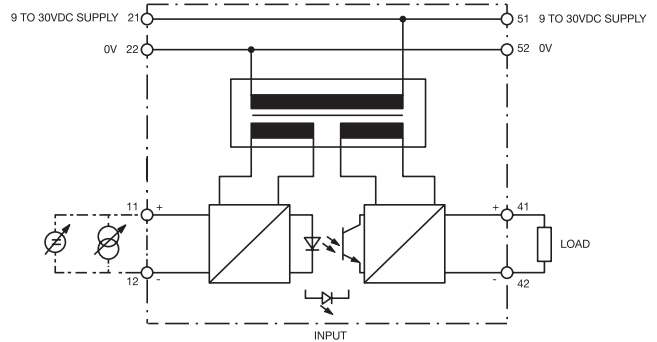
UPAC Analog DC Ultra SlimPak analogue transmitter DC

DC voltage or current input DC voltage or current output

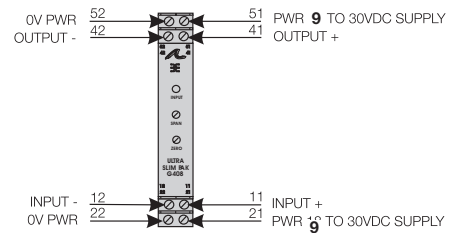
- User-configurable input and output ranges
- Supply voltage 9 ... 30 Vdc
- Setting via DIP switches
- Operating states indicated via LED
- Range of zero and span adjustable by 50 %
- 3-way isolation, 1800 Vdc



Circuit diagram



Connection diagram



Technical data

Input	
Voltage input	Configurable from 0 ... 20 mV to 0 ... 100 Vdc, unipolar or bipolar
Maximum overvoltage	200 Vdc
Input impedance	≥ 100 kΩ for voltage inputs > 2 V, ≥ 10 MΩ for voltage inputs ≤ 2 V
Current input	Configurable from 0 ... 1 mA to 0 ... 100 mA, unipolar or bipolar
Maximum overvoltage	60 Vdc
Maximum overcurrent	170 mA _{eff}
Input impedance	typ. 20 Ω
Range of zero adjustment	0 ... 50 % of input range using potentiometer on the front
Range of span adjustment	100 ... 50 % of input range using potentiometer on the front

Output	
Current output	0 ... 20 mA, 4 ... 20 mA max. load < 600 Ω 0 ... 1 mA max. load < 7.5 kΩ
Voltage output	Unipolar Out: 0 ... 5 V, 0 ... 10 V, Bipolar Out: -10 ... 10 V, -5 ... 5 V, min. load > 1 kΩ
Accuracy at 20 °C	typ. < ±0.1 %, max. ±0.2 %, of input range (20 mV and 2 mA in the range < ±0.5 %)
Stability	< 0.025 % from end value/°C
Response time	Typ. 200 ms (max. < 400 ms)

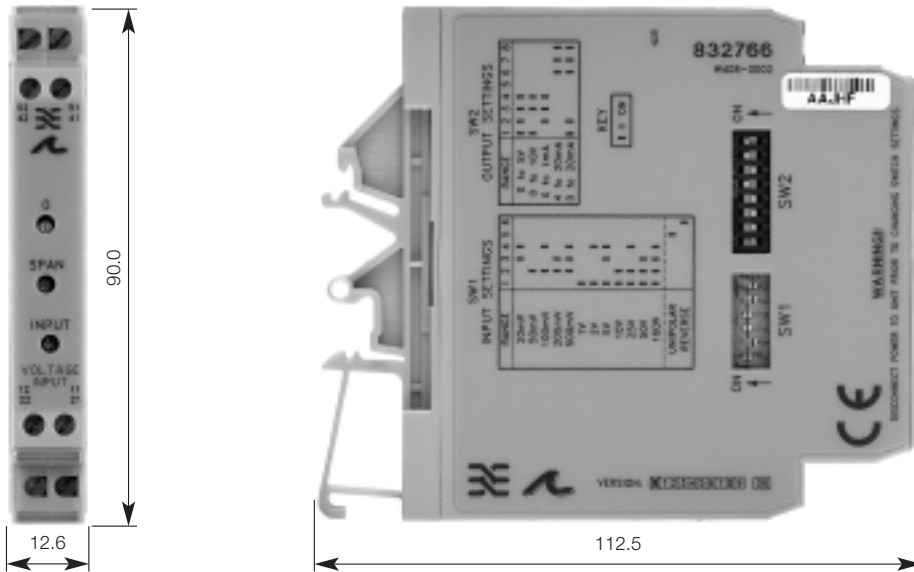
Status indication	
LED INPUT	Green, power ON Input > 110 %, 8 Hz blinking Input < 10 %, 4 Hz blinking

General	
Supply voltage	9 ... 30 Vdc, 1.5 W typ. 2.5 W max.
Current consumption	< 65 mA permanent at 24 Vdc
Isolation voltage	1800 Vdc between input, output and voltage supply
Operating temperature	0 ... +50 °C
EMC norm	EN 50081-1/EN 50082-2
Mounting	12.6 mm width housing for TS 35 or TS 32
Connection technology	Screw connection 0.5 ... 2.5 mm ²
Leave gap between modules for dense applications.	

Ordering information	
Module	Cat. No.
UPAC ANALOG U-IN / Unipolar OUT	832766
UPAC ANALOG I-IN / Unipolar OUT	832765
UPAC ANALOG U-IN / Bipolar OUT	833174
UPAC ANALOG I-IN / Bipolar OUT	833173

Preconfigured modules			
Input	Output	Input	Output
0 ... 10 V	0 ... 20 mA 4 ... 20 mA	0 ... 10 V	0 ... 20 mA 4 ... 20 mA
0 ... 10 V	832749 832714 832730	0 ... 2 V	832755 832720 832737
0 ... 50 mV	832750 832715 832731	0 ... 5 V	832756 832721 832738
0 ... 60 mV	832751 832716 832732	-5 ... +5 V	832761 832725 832743
0 ... 100 mV	832752 832717 832733	-10 ... +10 V	832762 832726 832744
0 ... 200 mV	832753 832718 832734	0 ... 20 mA	832747 832709 832729
0 ... 1 V	832754 832719 832735	4 ... 20 mA	832748 832713 832709
0 ... 10 V	0 ... 20 mA 4 ... 20 mA	0 ... 5 mA	0 ... 10 V 0 ... 20 mA 4 ... 20 mA
0 ... 50 mV	832749 832714 832730	0 ... 10 mA	832757 832722 832739
0 ... 60 mV	832750 832715 832731	0 ... 50 mA	832758 832723 832740
0 ... 100 mV	832751 832716 832732	-5 ... +5 mA	832759 832724 832741
0 ... 200 mV	832752 832717 832733	-20 ... +20 mA	832763 832727 832745
0 ... 1 V	832753 832718 832734		832764 832728 832746

Dimensions



Application ranges

- Signal conversion
- Signal separation
- Signal processing
- Suppression of mass loops (3-way isolation)
- Minimisation of spare-parts stocking due to adjustability

Voltage input module

Input	SW1					
	1	2	3	4	5	6
0 ... 20 mV		x	x	x		
0 ... 50 mV	x			x		
0 ... 100 mV	x		x	x		
0 ... 200 mV	x	x		x		
0 ... 500 mV	x	x	x	x		
0 ... 1 V	x			x		
0 ... 2 V	x			x	x	
0 ... 5 V	x		x	x	x	
0 ... 10 V	x	x		x		
0 ... 25 V	x	x		x	x	
0 ... 50 V	x	x	x		x	
0 ... 100 V	x	x	x	x	x	
-20 mV ... +20 mV		x	x			
-50 mV ... +50 mV	x					
-100 mV ... +100 mV	x		x			
-200 mV ... +200 mV	x	x				
-500 mV ... +500 mV	x	x	x			
-1 V ... +1 V	x					
-2 V ... +2 V	x			x		
-5 V ... +5 V	x		x	x		
-10 V ... +10 V	x	x				
-25 V ... +25 V	x	x		x		
-50 V ... +50 V	x	x	x			
-100 V ... +100 V	x	x	x	x		
Reverse						x

Output range selection

	SW2							
	1	2	3	4	5	6	7	8
Unipolar								
0 ... 5 V	x	x	x	x				
0 ... 10 V	x		x	x				
0 ... 1 mA	x	x	x					
4 ... 20 mA						x	x	x
0 ... 20 mA	x	x				x	x	x
Bipolar								
-5 ... +5 V	x							
-10 ... +10 V								

Current input module

Input	SW1					
	1	2	3	4	5	6
0 ... 2 mA			x	x	x	
0 ... 5 mA		x			x	
0 ... 10 mA		x		x	x	
0 ... 20 mA		x	x		x	
0 ... 50 mA		x	x	x	x	
0 ... 100 mA	x					x
-2 ... 2 mA			x	x		
-5 ... 5 mA		x				
-10 ... 10 mA		x		x		
-20 ... 20 mA		x	x			
-50 ... 50 mA		x	x	x		
-100 ... 100 mA	x					
Reverse						x

x indicates ON

Adjustment of zero/span range

The zero potentiometer allows for offset adjustments from 0 ... 50 %, according to the settings table.

The span potentiometer allows for adjustment of the final value from 100 ... 50 %, according to the settings table.

Example

With the selection range -500 ... +500 mV, 1 V span. The span can be adjusted down to give a 500 mV range. This can be offset by up to 500 mV with the zero potentiometer:

i.e. possible ranges

- 500 ... 0 V
- 300 ... +200 mV
- 50 ... +450 mV
- 0 ... +500 mV