

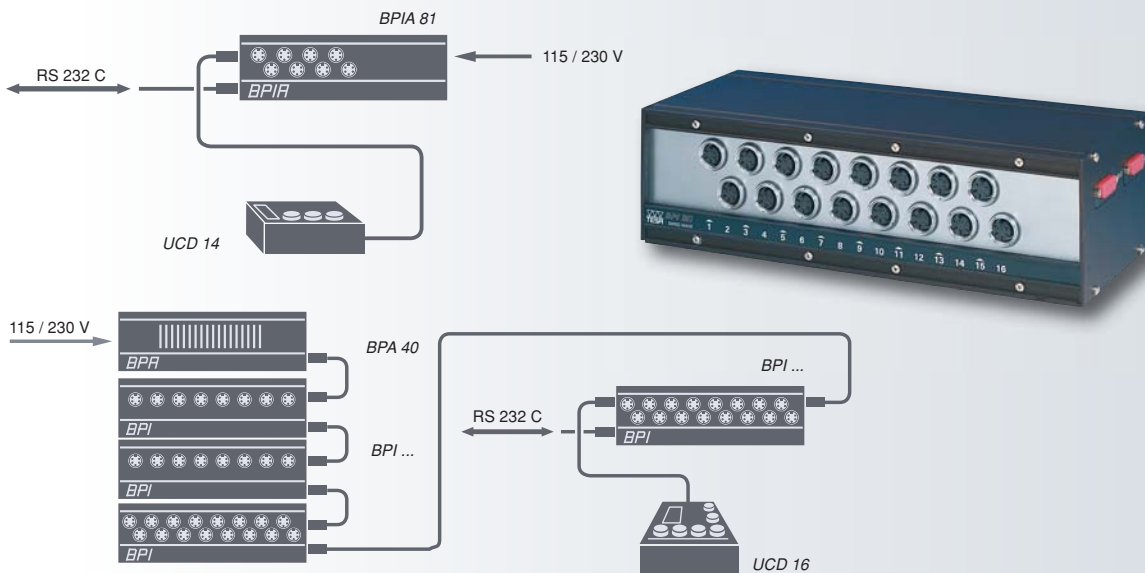
TESA Probe Interface Boxes

Modular system that consists of three basic models acting as probe interfaces for the preparation and further transmission of the measurement signals to a computer, whether in their digital or analogue form – All models are key components for multigauging fixtures applied in centralised process control.

BPI Series

Signal inputs – TESA standard probes (half-bridge)
 Signal outputs – RS 232 digital outputs

- Direct connection to the computer's serial port.
- Programmable operating functions over the integrated microprocessor.
- Possible connection of up to 64 probes for optimum adaptation to your metrology applications.
- High functional reliability and precision.
- Total immunity to negative environmental effects, e.g. electrical interferences, liquid and solid contaminants.



RS 232

2 mm, 0,2 mm

1 µm, 0,1 µm

± 0,3% with reference to each measuring span

7 ms per probe or 0,2 ms per probe for BPI 88

Housing cases in anodized aluminium except for stackable BPIA 81

0°C to 40°C

-10°C to 70°C

95%, non-condensing

IP51 (IEC 60529)

EN 50081-1
EN 50082-2

Shipping packaging

Identification number

Declaration of conformity



Number of probe inputs



Number of control inputs/outputs

Integrated power supply

05030004	BPIA 81 Probe interface box	8	6/8	●
05030007	BPIA 81-N Probe interface box	8	1/-	●
05030001	BPI 81 Probe interface box	8	6/8	—
05030002	BPI 161 Probe interface box	16	6/8	—
05030003	BPI 88 Probe interface box with quick signal processing in both static and dynamic measuring	8*	6/8	—
05031000	BPA 40 Power unit for 1 up to 4 interfaces BPI 81, BPI 161 and BPI 88			

* Each measurement signal includes a demodulator.

BPIA 81	6 / 8	220 ÷ 240 Vac, 100 ÷ 120 Vac, 50 ÷ 60 Hz, 25 VA	94 x 322 x 134	2,5
BPIA 81-N	1 / -	230 Vac ^{+10/-15%} , 115 Vac ^{+15/-25%} , 50 ÷ 60 Hz	97 x 320 x 155	3
BPI 81	6 / 8	Via BPA 40	94 x 322 x 134	2,1
BPI 161	6 / 8	Via BPA 40	94 x 322 x 134	2,1
BPI 88	6 / 8	Via BPA 40	94 x 322 x 134	2,1
BPA 40		115 ÷ 230 Vac ± 20%, 50 ÷ 60 Hz, 140 VA	94 x 322 x 134	2,4

Accessories for BPI series

05033000	BAP 10	Extension for digital outputs with positive logic	
04866009	BSF 10	Stacking set for BPI 81, BPI 88 and BPI 161 interface boxes	
05061001	BSF 20	Stacking set for both BPA 40 and BPIA 81 power units	

Connection cable			
05060007	BPI – BPI	0,3	
05060008		2	
05060003	BPI – PC	2	25 / 9
05060002		5	25 / 9
05060004		10	25 / 9
05060005	BPI – PC	2	25 / 25
05060001		5	25 / 25
05060006		10	25 / 25



Highly resistant plastic housing cases

3 m cable length

125 x 160 x 205 mm for UCD 16.
75 x 200 x 120 mm for UCD 14.

1,3 kg (UCD 16)
1,1 kg (UCD 14)

IP65 for UCD 14 (IEC 60529)

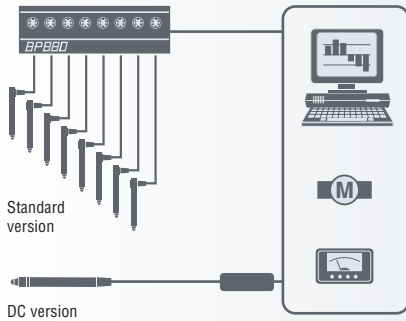


S50078033	UCD 16	Remote control unit for 4 electronic devices; functions: Start 1 to 4 incl. cancellation plus plausibility test; 3 lamps for value classification.
05062000	UCD 14	Remote control unit for 1 electronic device; functions: Start/Stop plus cancellation; 5 lamps for value classification.



BP 880 series

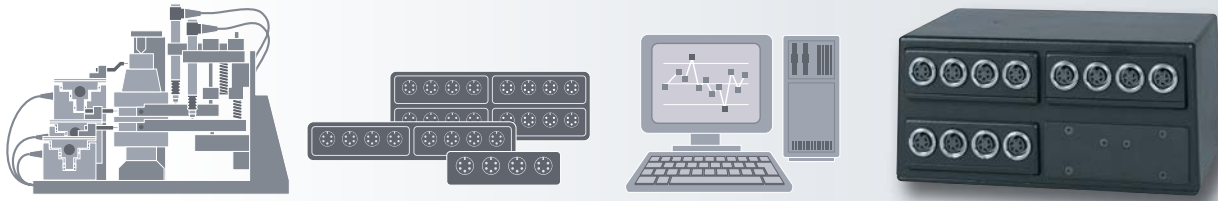
- Signal inputs – TESA standard probes (Half-bridge)
 Signal outputs – analogue outputs
- Allow the connection of up to 8 probes



No		Number of probe inputs
04890001	BP 880 Probe interface with multiplex output.	8
04890002	BP 880-Z Probe interface with multiplex output plus zeroing card.	8
04890000	BP 880-SP Probe interface for enhanced accuracy. Also with zeroing board	8
<i>Accessory</i>		
04866009	BSF 10 Stacking set for interfacing units	

M4P-2 series

- Signal inputs – TESA standard probes (Half-bridge)
 Signal outputs – analogue outputs
- System for connecting 32 TESA standard probes
 - Can be linked to a PC through the A/D transducer



No			mm	kg
S48001721	M4P-2	Probe interface <ul style="list-style-type: none"> • 4 probe inputs with a demodulator included • Sensitivity: 73,75 mV/V/mm • Analogue outputs: ± 1 V/mm, $\pm 2,5$ V/mm, ± 5 V/mm and ± 10 V/mm 	36 x 100 x 120	0,6
S48001722	R2M-1	Rack housing including 2 M4P-2 probe interfaces <ul style="list-style-type: none"> • 2 x 4 = 8 probe inputs 	55 x 212 x 144	0,9
S48001723	R4M-1	Rack housing including 4 M4P-2 probe interfaces <ul style="list-style-type: none"> • 4 x 4 = 16 probe inputs 	160 x 212 x 144	1,2
S48001724	MA4-2	Power unit <ul style="list-style-type: none"> • 230 \pm 10% Vac, 50 Hz • Output voltage: ± 15 V for 32 probes 	85 x 222 x 146	1,1
S48001731	MA4-2	Power unit <ul style="list-style-type: none"> • 110 \pm 10% Vac, 60 Hz • Output voltage: ± 15 V for 32 probes 	85 x 222 x 146	1,1
<i>Accessories</i>				
S48001725	CB37-1	Connection cable to host computer, 2 m long. Provided with two connectors, 37-pin male/female		

- ✓
- ± 10 V with reference to the measuring range
- $\pm 0,3\%$ or $\pm 0,025\%$ for BP 880-SP (each referring to the measuring span)
- $\leq \pm 250$ ppm/ $^{\circ}$ C
BP 880-SP = $\leq \pm 100$ ppm/ $^{\circ}$ C
- ± 15 Vdc $\pm 5\%$, $\leq \pm 250$ mA
- 15 $^{\circ}$ C to 40 $^{\circ}$ C
- 10 $^{\circ}$ C to 70 $^{\circ}$ C
- 30% to 80% (non-condensing)
- IP50 (IEC 60529)
- EN 50081-1
EN 50082-2
- 322 x 134 x 93,5 mm
- ≈ 2 kg
- Shipping packaging
- Identification number
- Declaration of conformity

- ✓
- M4P-2**
- $\pm 0,5\%$ with reference to the measuring span
- $\leq \pm 100$ ppm/ $^{\circ}$ C, stability at zero = $\leq \pm 0,2$ μ m/ $^{\circ}$ C
- ± 10 to ± 15 Vdc, 60 mA
- 15 $^{\circ}$ C to 40 $^{\circ}$ C
- 10 $^{\circ}$ C to 70 $^{\circ}$ C
- 30% to 80% (non-condensing)
- IP50 (IEC 60529)
- Shipping packaging