

ENABLING  
MICROSCALE  
RESEARCH



## UniAmp Portfolio

Introducing the new UniAmp portfolio for ALL Unisense microsensors!

Innovative amplifier solution providing new unique features and a full new level of user friendliness and performance:

### Temperature Compensation

Automatic compensation of changes in measured values caused by small temperature variations.

### E<sup>2</sup>PROM for PlugNPlay

Direct sensor recognition with settings of all sensors & storage of unique data on each sensor incl. calibration values

### ALL Unisense Microsensors

fx-6 UniAmp includes channels for pA, mV, T and optical sensors, thus one UniAmp for all our sensors!

### STOX sensor support

Measure down to <5nM oxygen with our unique STOX sensor

### Ease-of-use, Simple and Smart!

### Portfolio

**fx-6 UniAmp:** 2x pA, 2x mV, 1x T, 1x Opto

**fx-3 UniAmp:** 1x pA or 1x mV, 1x T, 1x Opto

**x-5 UniAmp:** 2x pA, 2x mV, 1x T

**H<sub>2</sub> UniAmp:** 1x pA for Hydrogen sensor, 1x T

**N<sub>2</sub>O UniAmp:** 1x pA for Nitrous Oxide sensor, 1x T

**H<sub>2</sub>S UniAmp:** 1x pA for Hydrogen Sulfide sensors, 1x T

**O<sub>2</sub> UniAmp:** 1x pA for Oxygen sensor, 1x T

**pH/Redox UniAmp:** 1x mV for pH or Redox, 1x T

pA: O<sub>2</sub>, H<sub>2</sub>, H<sub>2</sub>S, N<sub>2</sub>O, NO, STOX, mV: pH and Redox,

T: Temperature, Opto: Oxygen fiber optic

With our new UniAmp portfolio we take a step further in ensuring ease-of-use and improving performance of our microsensor range.

Sensor temperature compensation has so far been reserved to optical sensors but using long-time in-house data we now introduce temperature compensation for most of our microsensors.

Compensation covers +/- 3°C from calibration point and thus ensuring you better data. The E<sup>2</sup>PROM in each sensor sets all values on the amplifier, stores important sensor information with your data, and allows simple and easy storage of sensor specific calibration data.

The meter is USB powered and sensors are immediately polarized when connected. Windows service app initiate automatically when PC connected and allows for fast review of raw data and amplifier settings. Calibration and data logging are done via our SensorTrace Suite apps.

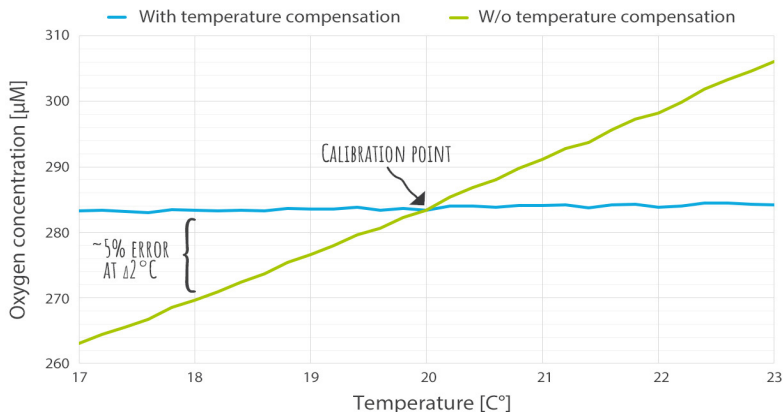


New Smart Snap Connector with 10 pins for full sensor range support and E<sup>2</sup>PROM!



Easy channel recognition by color and fully automatic and unique sensor identification with stored temperature compensation data.

### Importance of temperature compensation



### SPECIFICATIONS

TYPE		PICOAMPERE	pH/mV	OPTICAL	TEMPERATURE	PRESSURE
<b>INPUT CONNECTORS</b>						
	Sensor	Snap connector 10 pin	Snap connector 10 pin	Optical ST	Snap connector 4 pin	Built-in
	Reference (for mV-channels)	N/A	Banan plug on the cable	N/A	N/A	N/A
	Grounding	Banana plug				
	E <sup>2</sup> PROM sensor data	Type, Customizations, Serial Number, Calibration, Temperature Compensation				
<b>AMPLIFIER</b>						
	Polarization	Digitally adjust. ±1.8V	N/A	N/A	N/A	N/A
	Input range	±500pA - 500nA	±5000mV	N/A	-10°C - 100°C	300-1200 mbar
	Input impedance	N/A	>10 <sup>13</sup> Ohm	N/A	N/A	N/A
<b>POWER</b>						
	Power supply	USB				
	Specification	5V@500 mA (Max 350 mA draw)				
<b>A/D-CONVERTER</b>						
	Resolution	16 bit	16 bit	16 bit	16 bit	24 bit
	Sampling frequency	Digitally adjustable				
	Maximum frequency	20Hz	20Hz	1Hz	20Hz	0.2Hz
<b>INTERFACE</b>						
	Digital	USB				
	Analog In	2 channels 0-3.3V, 16 bit ADC (optional)				
	Analog Out	6 Channels 0-4V scaled or unscaled				
<b>DATA ACQUISITION SOFTWARE</b>						
	SensorTrace Logger	Included				
	Other Unisense Software	Optional: SensorTrace Suite				
	Software data output	CSV, Excel or SQL file				
<b>PHYSICAL</b>						
	Dimensions	225 x 165 x 50 mm (W x D x H)				
	Weight	Approx. 1.4 kg (3.1 lbs)				
<b>ENVIRONMENTAL</b>						
	Temperature range	Operating conditions 0°C-50°C (<90% RH non-condensing)				
	Warranty	1 year				
<b>CERTIFICATION</b>						
		CE				