

# MI 6401 Poly

The MI 6401 Poly is a portable multifunctional handheld instrument for measuring microclimate and light parameters such as illuminance, humidity, air temperature and air velocity of an environment. Emergency lighting, ventilation systems, lighting conditions, air conditioning systems, factory conditions, production line conditions and many more can be tested by the MI 6401. Specially designed housing enables connection of a few probes at the same time for testing of several parameters simultaneously. All the results can be stored in the internal memory of the instrument and then downloaded to PC via the SensorLink PRO software which is included in the standard set. For full data traceability to international standards the MI 6401EU set includes a full ISO accredited calibration certificate.

### MEASUREMENTS:

- Air temperature;
- Air velocity;
- Air flow;
- Relative humidity;
- Dew point;
- Temperature difference (option);
- K thermocouple temperature (option);
- Illuminance;
- Luminance (option);
- Contrast (option);
- Black globe radiant temperature (option);
- CO and CO<sub>2</sub> concentration (option).

### KEY FEATURES:

- **Adaptable:** using various standard and optional probes, the MI 6401 can be adapted to measure and calculate a combination of up to 16 different environments conditions (maximum 11 at the same time).
- **Long lasting:** record up to 160 days worth of data.
- **Accommodating:** due to optional prolongation cable or telescopic rod measurements in hard-to-reach spots are possible, while mounting on a tripod enables long-lasting recording.
- **Versatile:** can be used for spot checking of different locations or performing long investigations in a specific location.
- **Easy to use:** plug in the suitable probes and the device will automatically adjust for appropriate measurements.
- **PPD and PMV calculations:** predicted Percentage of Dissatisfied People (PPD) and Predicted Mean Vote (PMV) calculations are performed automatically.
- **Logger:** logging memory module allows to save up to 4000 measurements with adjustable integration period.



- **Downloadable:** up to 4000 test results can be stored in a two level memory structure and then downloaded to the PC with the help of the PC software SensorLink PRO.

### APPLICATION:

- Indoor air quality testing;
- Testing of factory climatic conditions;
- Testing of heating, ventilation and air conditioning systems;
- Testing of lighting conditions;
- Emergency lighting systems testing.

### STANDARDS:

#### Functionality:

DIN 5032 P1; DIN 5032 P2; DIN 5032 P3; DIN 5032 P4; DIN 5032 P6; DIN 5032 P7; EN 60751; EN 60584-1; EN 12599; EN ISO 7726; ISO 10526; ISO 10527

#### Electromagnetic compatibility:

EN 61326

#### Safety:

EN 61010-1

## TECHNICAL SPECIFICATION:

Function	Measuring range	Resolution	Accuracy
<b>Microclimatic probe A 1091</b>			
- Air temperature	-20 °C ... +60 °C	0.1 °C	±0.2 °C at 25°C ±0.5 °C over working range
- Relative humidity	0 %RH ... 10 %RH	0.1 %RH	±3 %RH
	10 %RH ... 90 %RH	0.1 %RH	±2 %RH
	90 %RH ... 100 %RH	0.1 %RH	±3 %RH
- Air velocity	0.10 m/s ... 9.99 m/s	0.01m/s	±(0.05 m/s + 5% of reading)
	10.0 m/s ... 20.0 m/s	0.1m/s	±(5% of reading)
<b>Temperature and humidity probe A 1127</b>			
- Air temperature	-20 °C ... +60 °C	0.1 °C	±0.5 °C
- Relative humidity	0 %RH ... 100 %RH	0.1 %RH	±3 %RH
Black Globe temperature (A 1131)	10.0 °C ... 49.9 °C	0.1 °C	±0.5 °C
	50.0 °C ... 84.9 °C	0.1 °C	±1.0 °C
	85.0 °C ... 120.0 °C	0.1 °C	±1.5 °C
Illuminance (A 1092; DIN 5032, Class B)	0.01 Lux ... 19.99 Lux	0.01 Lux	±(0.02 Lux + 8 % of reading)
	20.0 Lux ... 199.9 Lux	0.1 Lux	±(8 % of reading)
	200 Lux ... 1999 Lux	1 Lux	±(8 % of reading)
	2000 Lux ... 20000 Lux	10 Lux	±(8 % of reading)
Luminance (A 1132; DIN 5032, Class B)	0.1 cd/m <sup>2</sup> ... 39.9 cd/m <sup>2</sup>	0.1 cd/m <sup>2</sup>	±(0.2 cd/m <sup>2</sup> + 8 % of reading)
	40 cd/m <sup>2</sup> ... 399 cd/m <sup>2</sup>	1 cd/m <sup>2</sup>	±(8 % of reading)
	400 cd/m <sup>2</sup> ... 3999 cd/m <sup>2</sup>	1 cd/m <sup>2</sup>	±(8 % of reading)
	4000 cd/m <sup>2</sup> ... 40000 cd/m <sup>2</sup>	1 cd/m <sup>2</sup>	±(8 % of reading)
CO <sub>2</sub> concentration (A 1180)	0 ppm ... 5000 ppm	1 ppm	±(3 % of reading + 40 ppm)
CO concentration (A 1181)	0 ppm ... 500 ppm	1 ppm	±(5 % of reading + 5 ppm)
COM port	USB		
Memory	4000 values		
Display	Graphical LCD with backlight, 160 x 160 dots		
Power supply	6 x 1.2 V rechargeable batteries, type AA		
Protection degree	IP 40		
Dimensions	110 x 85 x 220 mm		
Weight	0.56 kg		

## STANDARD SET:

### MI 6401ST

- Instrument Poly
- Carrying case
- Probe adapter
- Microclimatic probe
- Illumination probe, type B
- Tripod adapter
- USB cable
- Power supply adapter
- 6 x NiMH rechargeable batteries, type AA

- PC SW SensorLink PRO
- Instruction manual
- Calibration certificate

### MI 6401EU

- MI 6401ST
- ISO calibration certificate for complete system

