

Automatic Meteorological Monitoring Station

– Complete solutions from one source –



UIT GmbH Dresden offers automatic meteorological monitoring stations. The core of this station is the approved data logger LogTrans 16-GPRS. The used meteorological sensors were provided by renowned suppliers. Typically the following parameters were monitored by a meteorological station.

Parameters

- Air temperature, humidity
- Wind speed, wind direction
- Global irradiance, atmospheric pressure
- Precipitation,
- Option: soil temperature, soil moisture, suction power in soil

Equipment

- The configuration will be done customized and according to the project specifications, respective.
- GPRS/ GSM – radio techniques is also available.



Umwelt- und Ingenieurtechnik GmbH Dresden
Postfach 80 01 40, 01101 Dresden, Deutschland
Zum Windkanal 21, 01109 Dresden, Deutschland

Phone: +49 351 88646-82
Fax: +49 351 8865774
E-Mail: sales@uit-gmbh.de
Internet: www.uit-gmbh.de

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Data Logger LogTrans 16-GPRS

Data logger LogTrans 16 mounted in field housing

Channels:

- 16 inputs; option: counter inputs
- 16 bit resolution
- 4 counter channels

Field housing:

- Input socket for sensors, integrated accumulator for power supply of data logger and sensors, respective

Technical data see data sheet LogTrans 16

Humidity/ Temperature Sensor

Humidity/ temperature sensor KPC 1/6-ME with the following specification:

Humidity:

- Measuring range: 0 ... 100 % r.H.
- Tolerance (MB 5 ... 95 % r.H., 10...40°C): ± 2 % r.H.

Sensor:

- Sensor (according DIN IEC 751): PT100 1/3 DIN
- Measuring range: -30 ... +70 °C
- Tolerance: ± 0.2 K



Wind Speed

Wind speed sensor (Anemometer) A 100L2 with the following specification:

- Start-up value: 0.25 m/s
- Measuring tolerance: 1% (± 0.1 m/s)
- Capacity: 75 m/s
- Linearity: 2%
- Temperature range: -30 ... + 55 °C
- Rotor made of ABS-plastics
- Output: 0... 2.5 V; option: counter output



Global Irradiance

Global Irradiance incl. measuring transducer:

- Output: 0 ... 5 VDC (characteristic curve/ meteorological application)
- Measuring range 0 ... 1300 W/m²
- Spectral sensitivity: 400 nm ... 1.100 nm
- Working temperature: -20 ... +6 °C
- Cosine correction: $f_2 < 3$ %
- Linearity: < 1 %
- Absolute error: < 10 %



Precipitation

Rain gauge (according to WMO-recommendation) with the following specification:

- Funnel and housing made of stainless aluminium alloy
- Area: 200 cm²
- Resolution: 0,1 mm per tilt
- Output: Magnetic reed switch (N.O.)
- Without or with heating, according to embodiment



Modifications contributing to technical progress are subject to change without notice.



UMWELTLEISTUNGEN

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