

Weather Backpack

MOBILE, PROFESSIONAL WEATHER STATION



Up to seven measurable parameters in research quality

Weather Backpack is the professional automatic weather station (AWS) for temporary measurement campaigns. This portable station measures all relevant meteorological parameters.

All-in-one station for all critical applications

Weather Backpack is the high-precision weather station that provides important data in meteorological research quality. Its outstanding measurement quality, reliability and durability will meet the highest demands in science and governmental environmental applications. The station can be easily stowed in its carrying case and quickly transported from one location to another. Since the station is mobile, even large areas can be covered.

APPLICATIONS

- Tracking of industrial emissions
- Disaster control
- Test tracks and test sites for vehicles
- Sporting events
- Wind warning for event security
- Diagnostics in building physics
- Research and science
- Environmental Agencies

Professional Line	Weather Backpack
Id-No.	30.00852.000001 • with weather sensor u[sonic]WS7
Meas. range wind direction	0...359.9°
Meas. range wind speed	0...65 m/s
Meas. range air temperature	-40...+70 °C
Meas. range rel. humidity	0...100 % r. h.
Meas. range barometric pressure	300...1100 mbar
Meas. range global radiation	0...2000 W/m ² ; global radiation within range of 285...3000 nm
Accuracy wind direction	2° (> 1 m/s) RMSE

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Professional Line	Weather Backpack
Accuracy wind speed	± 0.2 m/s RMSE (v 10 m/s); ± 2 % RMSE (10 v 65 m/s)
Accuracy air temperature	± 0.1 K (0...60 °C); ± 0.2 K (-40...0 °C) > 2 m/s
Accuracy rel. humidity	typically ± 1.5 % r. h. (0...80 %); ± 2 % r. h. (> 80 %)
Accuracy barometric pressure	± 0.5 mbar
Resolution wind direction	0.1°
Resolution wind speed	0.1 m/s
Resolution air temperature	0.1 °C
Resolution rel. humidity	0.1 % r. h.
Resolution barometric pressure	0.1 mbar
Resolution global radiation	0.2 W/m ²
Range of application	Outdoor
Environmental conditions	Sensor: -40...+70 °C; 0...100 % r. h. Battery: -10...+40 °C; 0...100 % r. h
Battery life	Battery life: approx. 8 days
Ethernet	10/100 BaseT; plug RJ45 shielded
Dimensions	Height mast: approx. 3 m
Protection class	IP 65
Weight	approx. 27 kg
Material	Case: Polypropylene; Mast: Aluminum
Included in delivery	Weather sensor u[sonic]WS7 Modbus, telescopic mast, outdoor case, mast mount, control cabinet with energy management, data cable with bayonet lock, mast adapter (clampable), rechargeable battery (12 V, 26 Ah), data logger met[LOG]
Options (order separately)	32.00852.060012 Sensor cable for additional Modbus sensor

As of: 05.08.2023