Professional Handheld Weather Station

A professional handheld station contains a data logger and a combined multiparameter weather probe. The station is equipped with a bright, readable OLED display. The station is powered from Li-ion batteries charged through the station's USB-C port.

With a professional data logger included, the handheld station is suitable not only for short-period measurement but also for longer campaigns. In addition to SD-card and USB-C, the station also provides a 4G modem and Bluetooth interfaces for transmitting the data as well as configuring the station. The station has a robust body that can be installed on top of MicroStep-MIS mobile meteorological masts or a standard camera tripod.

Wind speed

Range	0.01 m/s to 40 m/s
Accuracy	± 3 % to 40 m/s, ± 5 % to 60 m/s
Resolution	0.01
Starting threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

Wind direction

Range	0 - 360°
Accuracy	± 3 % to 40 m/s, ± 5 % to 60 m/s
Resolution	1°
Starting threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

Temperature

Range	-40 °C to +70 °C
Accuracy	± 0.3 °C @ 20 °C
Resolution	0.1
Sampling Rate	1 Hz
Units	°C, °F, °K

Humidity

Range	0 - 100 %
Accuracy	± 2 % @ 20 °C (10 % - 90 %RH)
Resolution	1 %
Sampling Rate	1 Hz
Units	% Rh, g/m³

Pressure

Range	300 to 1100 hPa
Accuracy	± 0.5 hPa @ 25 °C
Resolution	0.1 hPa
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

Interfaces and storage

USB	virtual serial port, mass storage
Bluetooth	version 5.2
Modem	built-in 4G module
Storage	micro SD card, internal non-volatile memory

4G modem

Operating temperature range	−40 °C to +85 °C
Environmental conditions	Operating temperature range: −40 °C to +70 °C Operating humidity range: 0 to 100 %

User interface

- Status LEDs
- USB
- Bluetooth
- Built-in OLED with keypad

Power options

Battery	Li-ion accumulator with monitoring and USB charging
Backup battery for low drift RTC	

Environmental parameters

Temperature	-40 – 70 °C
Humidity	0 – 100 % non-condensing
Protection	IP 67 (except sensors)

Menus and submenus of the AMS 111 Compact smartphone application