

EOLOS-NBC Static NBC weather sensor



POSSIBLE APPLICATIONS

- NBC reconnaissance and situation assessment
- Vehicle-based measurement systems
- Military operational planning
- Disaster and hazard prevention

Integrated weather station for military use

The EOLOS-NBC is an integrated, military-grade weather station for use in NBC (nuclear, biological, chemical) scenarios. It was developed specifically for mobile platforms and reliably provides mission-critical weather and environmental data even under extreme environmental and operational conditions. The EOLOS-NBC thus supports informed situation assessments, operational decisions, and protective measures in military operations and safety-critical applications.

- Reliable data for NBC operations
- Six measurement parameters in one compact system: wind speed, wind direction, air temperature, relative humidity, air pressure, and dew point temperature (calculated)
- Robust and proven in extreme conditions
- Low maintenance for high operational availability



PRODUCT OVERVIEW

EOLOS-NBC Static NBC weather sensor

Professional Line	EOLOS-NBC
Ident-No.	00.16433.602012
Measuring range wind direction	0...360° (0° when there is no wind and when there is wind, NORTH = 360°)
Measuring range wind speed	0...60 m/s (limited by firmware)
Air temperature measuring range	-40...+70 °C
Temperature measuring range	Ground temperature (ground temperature sensor, external): -40...+110 °C
Measuring range rel. humidity	0...100% RH
Air pressure measuring range	500...1100 hPa
Wind direction accuracy	± 5°
Wind speed accuracy	RMS: ± 0.2 m/s ± 3% up to 10 m/s ± 0.5 m/s ± 3% in the range from 10 to 40 m/s ± 0.5 m/s ± 5% in the range from 40 to 60 m/s
Air temperature accuracy	± 1 °C at wind speeds (v) > 2 m/s
Temperature accuracy	Ground temperature (ground temperature sensor, external): ± 1 °C
Relative humidity accuracy	± 3% (10...90%) / ± 4% (0...100%) at wind speeds (v) > 2 m/s
Air pressure accuracy	± 0.5 hPa at 25 °C / ± 2 hPa (-40...+85 °C)
Wind direction resolution	1°
Wind speed resolution	0.1 m/s
Air temperature resolution	± 0.1 °C
Resolution Temperature	Ground temperature (ground temperature sensor, external): 0.1 °C
Resolution rel. humidity	0.5% RH
Air pressure resolution	0.1 hPa
Input voltage	Typically 24 VDC (18...32 VDC)
Protocols	NMEA 0183 (interface standard); \$WIMWV; \$WIMHU; \$WIMMB; \$WIMTA
Interface	Transmission rate: 4800 baud Repetition rate: 1 complete sequence of data sets per second (1 Hz) Transmission parameters: 8 data bits, no parity bit, 1 stop bit
Operating conditions	Operating temperature: -40...+70 °C Storage temperature: -55...+95 °C
Power consumption	Max. 2.5 A
Dimensions	H 388 mm; Ø 120 mm; mast adapter 50 mm diameter
Housing	Device housing: aluminum; matte black, RAL 9005 Sensor head: black (hard anodized) Lamellae: white

Professional Line	EOLOS-NBC
Weight	2.5 kg
Standards and norms	• NMEA 0183 • Design standard: VDE 0100 • Low voltage standard: 72/23 EEC • EMC/EMI: DIN EN 60945 and DIN EN 61000-4-2, 3, 4, 6, 11 Salt spray: EN 60945 • Protection class: DIN EN 60529 • Vibration: BV 0240
Accessories (order separately)	32.16420.066100 Cable 10 m; with 12-pin bayonet plug; assembled

As of June 3, 2026

