NERO INDUSTRIES
Advanced Reliability

NE-MS1000 Meteorological Station

DS-1312202116001421-034

METEOROLOGICAL STATION

The Meteorological Station, developed and manufactured by Nero Industries, is a device that measures the change of weather events. Thanks to its high-sensitivity sensors, it measures the change of weather conditions with a minimum margin of error and transfers it to the user via communication interfaces such as RS-422, Ethernet and CAN-BUS.

Meteorological Station can perform the measurements of:

*Air Temperature
*Relative humidity
*Wind speed
*Wind direction
*Atmospheric pressure

It is suitable for wheeled-tracked vehicles and command control shelters equipped with light and medium caliber weapons.

TECHNICAL SPECIFICATIONS

Wind Speed	
Range	0 – 45 m/s
Accuracy	± 0.5 m/s +%5
Resolution	0.1 m/s
Response Time	< 1 s

Wind Direction	
Azimuth	0 – 360°
Accuracy	± 5°
Resolution	0.1°
Response Time	< 1s

Direction Of The Sensor To Magnetic North	
Azimut	0 – 360°
Accuracy	± 5°
Stability	0.30°
Resolution	0.1°

Air Tempereature	
Range	– 40°C – +125°C
Accuracy	± 0.25°C
Resolution	0.00625°C

Relative Humidity	
Range	0 -100 %
Accuracy	± 3 relative humidity
Response Time	1 sec
Resolution	%0.1

Dimensions	
Height	500 mm
Diameter	85 mm
Base Diameter	138 mm
Weight	<5 kg

GPS Positioning	
Latitude	90° N – 90° S
Longitude	180° E – 180° W
Accuracy	0.01 m horizontally and vertically with RTK

General Specs	
Working Temperature	– 40°C – + 80°C
Storage Temperature	– 40°C – + 85°C
Input Voltage	18 – 32 VDC MIL-STD-1275E

Data Trasnition	Can-Bus, RS - 422, RS-485, Ethernet

Absolute Atmospheric Pressure	
Range	10 – 1300 hPa (mbar)
Accuracy	± 1.5 hPa (mbar)
Resolution	0.012 hPa (mbar)

MILITARY TEST RESULTS

Low Pressure (Operating)	MIL-STD-810G, Method 500.5, Procedure II, up to 3000 m
Sun Radiation	MIL-STD-810G, Method 505.5, Procedure, Category A2
High Temperature (Operating)	MIL-STD-810G, Method 501.5, Procedure II, +55°C
High Temperature (Storage)	MIL-STD-810G, Method 501.5, Procedure I, +60°C
Low Temperature (Operating)	MIL-STD-810G, Method 502.5, Procedure I, -32 °C
Low Temperature (Storage)	MIL-STD-810G, Method 502.5, Procedure I, -40 °C
Humidity	MIL-STD-810G, Method 507.5, Procedure II, Figure 507.5-7
Rain	MIL-STD-810G, Method 506.5, Procedure II
Vibration	MIL-STD-810G, Method 514.6, Procedure I (General Vibration), Category 20 (Ground Tracked Vehicles)
Shock	MIL-STD-810G, Method 516.6, Procedure I, functional shock, 40 g 11 ms, Table 516.6-II, sawtooth impact (3 axes)
Dust	MIL-STD-810G, Method 510.5, Procedure I
Sand	MIL-STD-810G, Method 510.5, Procedure II

MILITARY STANDARTS

MIL-STD 810

MIL-STD 461F

MIL-STD 1275E