



AR-WS40 WEATHER STATION



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The Weather Station, developed and manufactured by AFSS, 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 and CAN-BUS.

Weather 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 - 40 m/s
Accuracy	± 0,5 m/s +%5
Resolution	0.1 m/s
Response Time	< 2 s

Wind Direction	
Azimuth	0 - 360°
Accuracy	± 5°
Resolution	0,1°
Response Time	< 2s

Direction Of The Sensor To Magnetic North	
Azimuth	0 - 360°
Accuracy	± 5°
Stability	0.1°
Resolution	0,00137°

Air Temperature	
Range	- 55°C - +250°C
Accuracy	± 0,25°C
Resolution	0,00465°C

Relative Humidity	
Range	0 -100 %
Accuracy	± 3 relative humidity
Response Time	1 sec
Resolution	%0,01

Dimensions	
Height	421 mm
Diameter	80 mm
Base Diameter	120 mm
Weight	<3,5 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
Built in Test	Sürekli
Input Voltage	18 - 32 VDC

Data Trasnition	Mil Can-Bus, RS - 422, Full Duplex
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Absolute Atmospheric Pressure	
Range	10 - 1300 hPa (mbar)
Accuracy	± 1,5 hPa (mbar)
Resolution	0,012 hPa (mbar)
Max. Pressure	10000 hPa

MILITARY TEST RESULTS

Humidity	Compliant with MIL-STD-810G, Method 507.5, Procedure II, Figür 507.5-7
Rain	Compliant with MIL-STD-810G, Method 506.5, Procedure II
Salt Mist	Compliant with MIL-STD-810G Method 509.5
Vibration	Compliant with MIL-STD-810G, Method 514.6, Procedure I, Category 20-b
Shock	Compliant with MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
Pressure	It is able to work from sea level up to 3000 meters altitude.
Dust	Compliant with MIL-STD-810G, Method 510.5, Procedure I
Solar	Compliant with MIL-STD-810G, Method 505.5, Procedure I/II, Category A2
EMI/EMC	Compliant with MIL-STD-461F Table 5.



MILITARY STANDARTS

MIL-STD 810G

MIL-STD 461F

MIL-STD 1275E