GPS Module
Rugged GPS with Weatherproof M8 2M

PART NUMBER

NWT-GPS-M8-OAS-02

PRODUCT DESCRIPTION

Industrial Outdoor IP67 Rated GPS, 2-meter Stainless Steel Armored USB, M8 Male USB IP67 Watertight Assembly, Rigid ASA Plastic Housing, 72 Channel All-In-View Tracking, u-blox M8 Chipset, WAAS / EGNOS Support

PRODUCT OVERVIEW

Industrial Armored Outdoor GPS Receiver that features a highly sensitive, low power consumption chipset in an ultra compact outdoor form factor. Powered by a u-blox M8 Chipset, and will provide you with superior performance in urban canyons, and in dense foliage. CGEE-start time of less than 15 seconds under most conditions without any network assistance.

AWG	Stranding	Material	No of Pairs
28	**7 x .127**	TC - Tinned Copper	1

Conductor Count	4
Total Number of Pairs	2
Conductor Size	28AWG 1 Twisted Pr, 24 AWG 2C 7x.2 Stranded TC
Insulation Material	PO - Polyolefin
Bonded-Pair	No

OUTER SHIELD MATERIAL

Type	Material	Coverage (%)	Drainwire Material	Drainwire AWG	Drainwire Construction (n x D)
Tape	**Aluminum / Mylar**	100	Tinned Copper	**28**	**7 x .127**

INNER JACKET MATERIAL

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord	Separator Material
Industrial Grade PVC - Polyvinyl Chloride	0.45mm	0.8mm	**No**	**Polyester**

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ENVIRONMENT

Input Power Range	4.5V-6.5V DC
Current Draw	60mA typical, 100mA max
USB Compliance	Universal Serial Bus 2.0
Frequency	72-channel u-blox M8 engineGPS/QZSS L1 C/A, GLONASS L10FBeiDou B1, Galileo E1B/CSBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
C/A Code	1.023 Mhz chip rate
Sensitivity	-167dBm Tracking & Nav, -160dBM Reaquisition-148dBm cold start
Accuracy	2.0M CEP
Acquisition	8sec avg hot start, 26sec cold start, 1sec hot start
Connector Type	M8 Male USB IP67 Watertight Assembly
UL Voltage Rating (Cable)	30V RMS
Altitude Limit	18,000M
Velocity Limit	515M/sec
Acceleration Limit	Less than 4g

TEMPERATURE RANGE

Installation Temp Rage	-40°C To +85°C
UL Temp Rating	85°C
Operating Temp Range	-40°C To +85°C

MECHANICAL CHARACTERISTICS

Dimension	88mm X 79mm X 35mm
Weight	0.35kg
Mounting Pipe Diameter	25mm - 64mm

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MECHANICAL CHARACTERISTICS (OUTER CABLE ARMOR)

USB Cable Length	2 meters
Jacket Material	Black PVC
Armor Material	304 Stainless Steel

STANDARDS

GPS Standards	NMEA 0183, WAAS, EGNOS, MSAS, QZSS, GAGAN, IMES
RoHS Compliant	Yes
UL Type	CM
CSA Standards	FT4
Derating	Operating temperatures are subject to de-rating. Cable passes -40°C Cold Bend per UL 1581

SUITABILITY

Indoor	No
Oil Resistance	Yes
Outdoor/Sunlight Exposure (UV)	Yes
Plenum	No
Direct Burial	No

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