Application **Ready Platform**

Application Ready Platform (ARP) for In-vehicle Applications



Features

- Designed for harsh automotive environment for IP rating/ wide operating temperature/shock/vibration resistant
- Easy for installation and maintenance .
- Proven system integration with TREK/PWS series products
- Provide SDK, utility, sample code for easy SW development

Introduction

Advantech Application Ready Platforms (ARP) provide a total solution for in-vehicle applications to improve safety, performance and flexibility. With our ARP solutions, effort on system integration, verification, and qualification is drastically reduced. Moreover ARP products are designed to withstand severe environments, e.g. shock/vibration, water, dust, high or low temp and more.



Total Pixels: NTSC: 811(H) x 508(V); PAL: 795(H) x 596 (V) •

· With infrared LED for nighttime condition

- IP68
- All settings, alerts, reference pressures, configurable network.
- Handles data from all connected Universal Repeaters

- Operating Temperature: -20° C ~ 70° C Wide viewing angle (H: 122° / V: 91°) with Fisheye correction
- · Aluminum die-cast chassis for compact, solid-state body

AD\ANTECH

(160 tires total)

Application Ready Platform

RAM-MOUNT-01E



Features

- 4.75" VESA base
- 5.625" double socket arm for 1.5" ball base
- 2.5" width square rail clamp base
- Suitable products: TREK-306/753/773. PWS-770/870 vehicle docking station

RAM-MOUNT-09E

RAM-MOUNT-06E



Features

- 3.625" VESA base at both sockets
- 5.625" double socket arm for 1.5" ball base
- Suitable products: TREK-306/753/773. PWS-770/870 vehicle docking station

TREK-MNT-301E

RAM-MOUNT-07E



Features

- Flat 2.5" diameter base with AMPS hole pattern
- 5.625" double socket arm for 1.5" ball base
- 3.625" VESA base at both sockets
- Suitable products: TREK-306/722/723

TREK-MNT-302E



Features

- Flat 2.5" diameter base with AMPS hole pattern
- 5.625" double socket arm for 1.5" ball base
- 2.5" width square rail clamp base
- Suitable products: TREK-303/722/723



Features

- Flat base with AMPS hole pattern
- 140 mm double socket arm for 26 mm ball base
- Cost effective/ rotate 360°
- Suitable products: TREK-303/722/723



Features

- Flat base with AMPS hole pattern
- 140 mm double socket arm for 26 mm ball base
- 156 mm VESA base
- Cost effective/ rotate 360°
- Suitable products: TREK-303/722/723

TREK-ANT-501-GWH5E



Features

- Screw-mount 3-in-1 combo antenna
 - GPS
 - HSPA/GSM/CDMA/UMTS
 - Dual-band Wi-Fi (2.4GHz / 5GHz)
- IP67
- 5-meter cable
- Φ145.6 x 35.1 mm (D x H)

TREK-ANT-201-GWL3E



Features

- Adhesive-mount 3-in-1 combo antenna - GPS/Glonass
 - LTE/HSPA/GSM/CDMA/UMTS
 - Dual-band Wi-Fi (2.4GHz / 5GHz)

IP67

- 3-meter cable
- 200.5 x 66.5 x 9 mm (L x W x H)

TREK-ANT-502-GH5E



Features

- Screw-mount 2-in-1 combo antenna - GPS/Glonass
- HSPA/GSM/CDMA/UMTS
- IP67
 - 5-meter cable
 - Φ55 x 19.6 mm (D x H)

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Application **Ready Platform**

Application Ready Platform (ARP) for In-vehicle Applications



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- IP68
- All settings, alerts, reference pressures, configurable network.
- Handles data from all connected Universal Repeaters

- Operating Temperature: -20° C ~ 70° C Wide viewing angle (H: 122° / V: 91°) with Fisheye correction
- · Aluminum die-cast chassis for compact, solid-state body

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(160 tires total)

Application Ready Platform

RAM-MOUNT-01E



Features

- 4.75" VESA base
- 5.625" double socket arm for 1.5" ball base
- 2.5" width square rail clamp base
- Suitable products: TREK-306/753/773. PWS-770/870 vehicle docking station

RAM-MOUNT-09E

RAM-MOUNT-06E



Features

- 3.625" VESA base at both sockets
- 5.625" double socket arm for 1.5" ball base
- Suitable products: TREK-306/753/773. PWS-770/870 vehicle docking station

TREK-MNT-301E

RAM-MOUNT-07E



Features

- Flat 2.5" diameter base with AMPS hole pattern
- 5.625" double socket arm for 1.5" ball base
- 3.625" VESA base at both sockets
- Suitable products: TREK-306/722/723

TREK-MNT-302E



Features

- Flat 2.5" diameter base with AMPS hole pattern
- 5.625" double socket arm for 1.5" ball base
- 2.5" width square rail clamp base
- Suitable products: TREK-303/722/723



Features

- Flat base with AMPS hole pattern
- 140 mm double socket arm for 26 mm ball base
- Cost effective/ rotate 360°
- Suitable products: TREK-303/722/723



Features

- Flat base with AMPS hole pattern
- 140 mm double socket arm for 26 mm ball base
- 156 mm VESA base
- Cost effective/ rotate 360°
- Suitable products: TREK-303/722/723

TREK-ANT-501-GWH5E



Features

- Screw-mount 3-in-1 combo antenna
 - GPS
 - HSPA/GSM/CDMA/UMTS
 - Dual-band Wi-Fi (2.4GHz / 5GHz)
- IP67
- 5-meter cable
- Φ145.6 x 35.1 mm (D x H)

TREK-ANT-201-GWL3E



Features

- Adhesive-mount 3-in-1 combo antenna - GPS/Glonass
 - LTE/HSPA/GSM/CDMA/UMTS
 - Dual-band Wi-Fi (2.4GHz / 5GHz)

IP67

- 3-meter cable
- 200.5 x 66.5 x 9 mm (L x W x H)

TREK-ANT-502-GH5E



Features

- Screw-mount 2-in-1 combo antenna - GPS/Glonass
- HSPA/GSM/CDMA/UMTS
- IP67
 - 5-meter cable
 - Φ55 x 19.6 mm (D x H)

ADVANTECH



Application-Ready Platforms

Application-Ready Platforms for In-Vehicle Applications

RAM-MOUNT-01



Features

- 92 mm/3.625 in VESA base at both sockets
- 142.8 mm/5.625 in double socket arm for 38 mm/ 1.5 in ball base
- 63.5 mm/2.5 in diameter base with AMPS hole nattern
- Suitable products: TREK-306/773, PWS-870/872 vehicle docking station

TREK-MNT-301E



RAM-MOUNT-06E

Features

- 92 mm/3.625 in VESA base at both sockets
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- Suitable products: TREK-306/773. PWS-870/872 vehicle docking station

TREK-MNT-302E

RAM-MOUNT-07E



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- 92 mm/3.625 in VESA base at both sockets
- 142.8 mm/5.625 in double socket arm for 38 mm/ 1.5 in ball base
- Flat 63.5 mm/2.5 in diameter base with AMPS hole nattern
- Suitable products: TREK-306/734, AIM-65/68 vehicle docking station

TREK-MNT-303E



Features

- Flat base with AMPS hole pattern
- 140 mm/5.51 in double socket arm for 26 mm/1 in ball base
- Cost-effective design
- Supports 360° rotation
- Suitable products: TREK-303/733L/734

TREK-ANT-501-GWH5E



Features

- Screw mount 3-in-1 combo antenna
 - GPS
 - HSPA/GSM/CDMA/UMTS
- Dual-band Wi-Fi (2.4/5 GHz)
- IP67 rating for protection from water and dust
- 5-meter cable
- 145.6 x 35.1 mm/5.73 x 1.38 in (D x H)



- Flat base with AMPS hole pattern
- 140 mm/5.51 in double socket arm for 26 mm/1 in ball base
- 156 mm/6.14 in VESA base
- Cost-effective design •
- Supports 360° rotation
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TREK-ANT-201-GWL3E



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- GPS/Glonass
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- IP67 rating for protection from water and dust 3-meter cable
- 200.5 x 66.5 x 9 mm/7.89 x 2.61 x 0.35 in $(L \times W \times H)$



Features

- Rubber in-vehicle windshield mounting kit
- 360° arm and joint swivel design for flexible adjustment
- Aluminum cast alloy and durable rubber for harsh invehicle environments
- Suitable products: TREK-303/733L/734

TREK-ANT-502-GH5E



Features

- Screw mount 2-in-1 combo antenna GPS/Glonass
 - HSPA/GSM/CDMA/UMTS
- IP67 rating for protection from water and dust
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- 55 x 19.6 mm/2.16 x 0.77 in (D x H)



Features

Application-Ready Platforms

Application-Ready Platforms for In-Vehicle Applications

RAM-MOUNT-01



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TREK-ANT-501-GWH5E



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Application-Ready Platforms

Application-Ready Platforms for In-Vehicle Applications

RAM-MOUNT-01



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TREK-ANT-501-GWH5E



Features

- Screw mount 3-in-1 combo antenna
 - GPS
 - HSPA/GSM/CDMA/UMTS
- Dual-band Wi-Fi (2.4/5 GHz)
- IP67 rating for protection from water and dust
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- 5-meter cable
- 55 x 19.6 mm/2.16 x 0.77 in (D x H)



Features

TREK-773

7" All-in-One Ultra Rugged Mobile Data Terminal



Features

- Intel[®] Atom[™] E3827 SOC with support for WES8, WES7, Win10, and Ubuntu operating systems
- 7" WVGA wide-angle LCD resistive touchscreen
- Vehicle diagnostics interface with CAN (J1939, OBD-II/ISO 15765) and J1708 (J1587) protocols
- Built-in GNSS, WLAN, Bluetooth, LTE WWAN modules and optional NFC
- Intelligent vehicle power management system supports ignition on/off/ delay functions, wake-up event control, and system health monitoring and diagnostics
- Wide operating temperature range (-30 ~ 60 °C/-22 ~ 140 °F)
- Supports 12/24 V vehicle power (ISO 7637-2)
- MIL-STD-810G and 5M3 certified for shock and vibration tolerance
- Supports voice recognition and intelligent video analytics

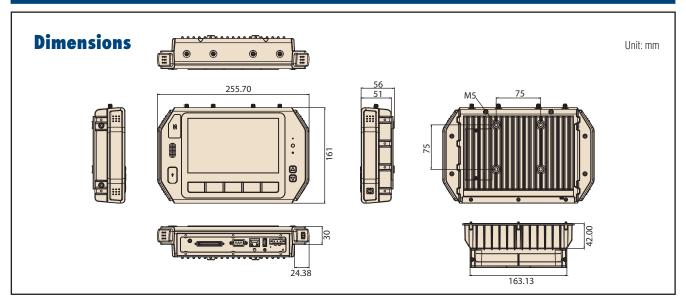
Introduction

TREK-773 is a next-generation, all-in-one 7" mobile data terminal. Equipped with an Intel[®] Atom™ E3827 SOC, TREK-773 offers high-performance computing with wired connections such as Gigabit Ethernet, CAN2.0B (J1939, OBD-II/ISO 15765), and J1708 (J1587). The integrated LTE (backwards compatible with CDMA/HSDPA), GPS, WLAN, and Bluetooth communication interfaces ensure connectivity and real-time data transmissions. Aimed at the automotive market, TREK-773 is compatible with 12/24 V vehicle power and compliant with ISO7637-2 & SAE J1113, ensuring system operation during engine starts. Moreover, the system's ruggedized chassis, wide operating temperature range (-30 ~ 60 °C/-22 ~ 140 °F), and shock (100G, 6ms) and vibration tolerance support operation in harsh industrial environments.

Specifications

-		
Core	Processor	Intel® Atom™ E3827 dual-core, 1.75 GHz
	Memory	Up to 4 GB DDR3L-1333 memory (2 GB default)
	Graphics	Integrated 2D/3D graphics engine
	Operating System	Windows Embedded 8 Standard (32-bit) and Win10 IoT LTSB (32-bit)bdefault, with Windows Embedded 7 Standard and Linux available upon
	1 0 7	request
Storage	CFast	1 x externally accessible CFast slot with cover and supports system boot up (16GB default for WES8, 32GB default for Win10 IoT LTSB)
Sturage	SD Card	1 x externally accessible push-push-type SD slot with cover for convenient expansion
	Туре	7" industrial-grade TFT LCD
Display	Resolution	WVGA (800 x 480)
Display	Brightness (cd/m ²)	500 cd/m ² (typical)
	Viewing Angle (H/V)	170°/170°
Touchscreen	Туре	4-wire analog resistive touchscreen with 3H surface hardness and IKO6 (510 g steel ball drop @300 mm) support (Optional sunlight readable touchscreen available upon request)
	Transparency	84% ±3%
Sensor	Sensor	Light sensor, G-sensor
	Function Keys	5 x programmable function keys with green LED indicators
		1 x SIM card slot (left)
	Standard I/O	1 x High-speed full RS-232 (rear) (RS232 RI pin can be configured to 12 Vpc output)
		1 x USB 3.0 host Type A (rear) 1 x Giga LAN with RJ45 connector (rear)
1/0	Extended I/O ²	1 x Mic-In/1 x Stereo Line-In/1 x Stereo Line-Out, 1 x CVBS input, 1 x USB 2.0 host 1 x High-speed full RS-232, 1 x RS-485 with auto flow control 4 x Isolated DI (dry contact), 4 x isolated D0 (open collector output, driven by replay) 1 x CAN bus (supports raw CAN, J1939, OBD-II/ISO 15765) 1 x J1708 (supports J1587) 1 x 12 Vsc/1.5A continuous current output (shared with standard I/O full RS-232 DB9)
I/O	Power Button/LED Indicators	1 x Power button; 1 x Power LED indicator (yellow)
	WLAN + Bluetooth	IEEE 802.11a/b/g/n + Bluetooth (V4.0 LE, V3.0+HS, V2.1+EDR) combo module via full-size mini PCIE slot (Optional high-power WLAN for roaming available upon request)
RF	WWAN	4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev a1, 1xRTT) Sierra Wireless MC73xx via full mini-PCIe (MC7354 for US/MC7304 for EU default)
	GNSS	Built-in u-blox MAX-M8Q GPS/GIONASS/BeiDou module and A-GPS support
	Antenna	1 x GPS, 2 x WWAN (LTE), 2 x WLAN/Bluetooth
	NFC (Optional)	ISO/IEC 14443A, 14443B, 15693; MIFARE 1K/4K, Ultralight; NFC-IP2 protocol
Power	Input Voltage	Supports 12/24 V vehicle power, 9 ~ 32 V_{DC} input (ISO 7637-2 and SAE J1113 compliant) (Optional support for 18 ~ 58 V_{DC} input available upon request)
	Intelligent Vehicle Power Management (iVPM 2.0)	System power on/off management (e.g., programmable ignition On/Off/Delay), system monitoring and diagnostics, system power protection (vehicle battery low voltage protection), and wake-on-alarm (RTC), wake-on-call/SMS, and wake-on-G-sensor events
Mechanical	Dimensions (W x H x D)	255.7 x 161 x 56 mm (10.06 x 6.33 x 2.20 in)
	Weight	2.2 kg (4.8 lb)

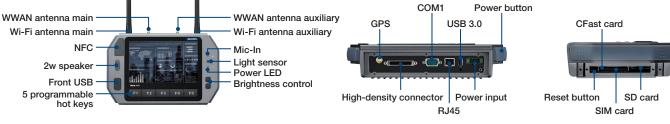
TREK-773



Specifications Cont.

Environment	IP Rating	IP54 (excluding I/O); optional IP54 protection for entire system with additional I/O cover
	Vibration/Shock	MIL-STD-810G, EN60721-3(5M3)
	EMC/Safety	CE, FCC, CCC; UL/cUL, CB
	Vehicle Regulation	E-mark (E13) for 12/24 V system, SAE J1455 class C, ISO 7637-2, SAE J1113
	Railway	EN50155
	RF Regulation	CE (R&TTE), FCC ID
	Operating Temperature	-30 ~ 60 °C (-22 ~ 140 °F)
	Storage Temperature	-40 ~ 80 °C (-40 ~ 176 °F)

I/O Connectors



Ordering Information

Part Number	Description
TREK-773R-00A0E	TREK-773R Intel BYT E3827 (2C, 1.75GHz) barebone unit w/NFC
TREK-773R-01A0E	TREK-773R Intel BYT E3827 (2C, 1.75GHz) barebone unit
TREK-773R-LWB8A0E	TREK-773R w/LTE(EU)/GPS/WLAN/BT/NFC/CFast/WES8
TREK-773R-LWB8B0E	TREK-773R w/LTE(US)/GPS/WLAN/BT/NFC/CFast/WES8
TREK-773R-LWBXA0E	TREK-773R w/LTE(EU)/GPS/WLAN/BT/CFast/W10
TREK-773R-LWBXB0E	TREK-773R w/LTE(US)/GPS/WLAN/BT/CFast/W10

Note: WES7, and Linux operating system is available upon request.

Packing List

Part Number	Description
1700019031	1 x 12/24V 2M power cable
1750007909-01	2 x Outdoor dipole Wi-Fi antennas
1750007924-01	1 x Outdoor LTE/GPS combo antenna, 3M
1750007926-01	1 x Outdoor LTE antenna, 3M
1990018848T000	2 x USB/LAN cable clips
	1 (TREW 3700 0000E (TREW 3700 0100E) 1 1 1 1 0

Note: The TREK-773 barebone unit (TREK-773R-00A0E/TREK-773R-01A0E) includes 1 x 2M power cable.

Option items

Part Number	Description
1700020128	12/24V 5M power cable
1700019307	High-density cable (MDR 50P/BNC+audio jack*3+USB-A+D-sub 9P)
RAM-MOUNT-01	VESA RAM mount w/clamp base, 1.5" ball
RAM-MOUNT-06E	VESA RAM mount w/VESA base, 1.5" ball
9668TREK35E	AC/DC power kit
9668TREK37E	IP54-rated I/O cover

TREK-773 CTOS KIT

Part Number	Description
9668T77300E	TREK-773 WLAN kit (802.11a/b/g/n BT combo)
9668T77301E	TREK-773 LTE module kit for US (MC7354)
9668T77302E	TREK-773 LTE module kit (MC7304)
9668T77303E	TREK-773 GPS kit

Embedded OS

Part Number	Description
2070013976	Image WES7P TREK-773 v1.00 X86 ENG 32bit
2070013975	Image WES8 TREK-773 v1.02 X86 ENG 32bit
20708WX6ES0016	Image WIN10 LTSB-6(Atom) TREK-773 V1.01 X86 7MUI 32bit
20708WX6ES0015	Image WIN10 LTSB-6(Atom) TREK-773 V1.01 X64 7MUI 64bit
2070014080	Image Linux Ubuntu 14.04 V1.0.4 ENG 32bit



Heavy duty screw mount

Features

- Heavy duty screw mount
- IP67 compliance

Introduction

TREK-Ant-50Xis 2in1 GPS/GLONASS & Cellular combination antenna is an extremely low profile combination high performance GPS/GLONASS and pentad-band cellular antenna solution for professional telematics applications. At only 22 mm height it is the lowest profile antenna in the market, with a diameter of 55mm. It is designed to be mounted and couple to the metal structures it attaches to radiate. Durable UV ABS housing, thread and nut is resistant to vandalism and direct attack. The IP67 waterproof robust plastic body makes it extremely light, economical for shipping and minimum weight impact on vehicles. This also makes it ideal for use in humid environments such as water pits or marine applications as there are no external metal parts to corrode. The closed cell foam with double-sided adhesive provides a permanent waterproof seal and can adjust to different curvatures, stopping water from leaking under the antenna into the mounting hole.

Specifications

Mechanical	Dimensions	Height 30±2 mm x Diameter55±2mm
	Cable length	5000±30mm
	Casing	ABS
	Connector	RP SMA Male
	Temperature Range	-40°C to 85°C ±5°C
	Waterproof	IP-67
Environmental	Thermal Shock	100 cycles -40°C to +80°C
	Shock (drop test)	1m drop on concrete 6 axes
	Humidity	Non-condensing 65°C 95% RH

Ordering Information

Item	Specification
TREK-ANT-502-GH5E	Antenna 2in1GPS/GLONASS & Cellular RP SMA(M)5M



Heavy duty screw mount

Features

- Heavy duty screw mount
- IP67 Waterproof
- Heavy Duty Integrated Metal Base/ Ground-plane

Introduction

TREK-ANT-20X is a heavy-duty antenna, fully IP67 waterproof external M2M antenna for use in telematics, transportation and remote monitoring applications.

The Spartan is unique in the market because it combines a 3in1 GPS/GLONASS, Cellular (2G and 3G) and Wi-Fi, heavy-duty antenna with high efficiency in a compact format. The antenna screws down permanently onto a roof or metal panel and can be pole or wall-mounted with a metal bracket. For industries such as commercial vehicle telematics, remote monitoring, smart meter systems and construction equipment, the spartan provides a robust, rugged antenna that is durable, even in extreme environments. All while still maintaining 20dB isolation between antennas. It uses high-shielded PTFE dielectric ultra-low-loss cables that maintain lowattenuation at all frequency bands, with an average 0.3dB per meter (0.1dB per foot), compared to 0.7dB for RG58 and 1.2dB for RG174. Because of this, the Spartan maximizes chances of passing PTCRB and network approvals first time. The Spartan also has excellent GPS/GLONASS reception without need to attach to an external ground-plane due to coupling to its unique own metal base.

Specifications

Mechanical	Dimensions	Height 65.35mm±2mm x Diameter 145.6mm±2mm
	Cable Length	5000±30mm
	Casing	PC/ABS Alloy
	Connector	RP SMA Male
	Temperature	-40°C to 85°C ± 5°C
	Waterproof	IP67
Environmental	Thermal Shock	100 cycles -40°C to +80°C ± 5°C
	Shock (drop test)	1m drop on concrete 6 axes
	Humidity	Non-condensing 65°C to 95% RH

Ordering Information

 Item
 Specification

 TREK-ANT-501-GWH5E
 Antenna 3IN1 GSM GPRS/WIFI RP SMA(M) 5M

AD\ANTECH



Adhesive Foam

Features

- AdhesiveFoam
- IP67 Antenna
- Heavy-Duty- Integrated Metal Base/ Ground-plane

Introduction

TREK-ANT-20X is a 3 in 1 GPS-GLONASS, LTE Cellular 2G/3G/4G and Wi-Fi 2.4/5GHz antenna is a low profile, heavy-duty, fully IP67 waterproof external M2M antenna for use by RF professionals in telematics, transportation and remote monitoring applications. The Stream 3in1 is unique in the market as it combines the highest possible efficiency and peak gain for GPS-GLONASS, Wi-Fi dual-band 2.4/5GHz and all cellular bands in 2G/3G/4G in a low profile compact format for mounting via high quality first tier automotive approved 3M adhesive foam.

Specifications

Mechanical	Dimensions	Long 196.57mm*Width 62.57mm*High 1.25mm
	Cable length	3000±30mm
	Casing	ABS
	Connector	RP SMA Male
	Temperature Range	-40°C to 85°C ±5°C
	Waterproof	IP-67
Environmental	Thermal Shock	100 cycles -40°C to +80°C ± 5°C
	Shock (drop test)	1m drop on concrete 6 axes
	Humidity	Non-condensing 20% to 95% RH

Ordering Information

Item	Specification
TREK-ANT-201-GWL3E	Antenna3in1GPS-GLONASS/LTE/Wi-Fi RP SMA(M)3M



Heavy duty screw mount

Features

- Heavy duty screw mount
- IP67 compliance

Introduction

TREK-Ant-50Xis 2in1 GPS/GLONASS & Cellular combination antenna is an extremely low profile combination high performance GPS/GLONASS and pentad-band cellular antenna solution for professional telematics applications. At only 22 mm height it is the lowest profile antenna in the market, with a diameter of 55mm. It is designed to be mounted and couple to the metal structures it attaches to radiate. Durable UV ABS housing, thread and nut is resistant to vandalism and direct attack. The IP67 waterproof robust plastic body makes it extremely light, economical for shipping and minimum weight impact on vehicles. This also makes it ideal for use in humid environments such as water pits or marine applications as there are no external metal parts to corrode. The closed cell foam with double-sided adhesive provides a permanent waterproof seal and can adjust to different curvatures, stopping water from leaking under the antenna into the mounting hole.

Specifications

Mechanical	Dimensions	Height 30±2 mm x Diameter55±2mm
	Cable length	5000±30mm
	Casing	ABS
	Connector	RP SMA Male
Environmental	Temperature Range	-40°C to 85°C ±5°C
	Waterproof	IP-67
	Thermal Shock	100 cycles -40°C to +80°C
	Shock (drop test)	1m drop on concrete 6 axes
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Ordering Information

Item	Specification
TREK-ANT-502-GH5E	Antenna 2in1GPS/GLONASS & Cellular RP SMA(M)5M



Heavy duty screw mount

Features

- Heavy duty screw mount
- IP67 Waterproof
- Heavy Duty Integrated Metal Base/ Ground-plane

Introduction

TREK-ANT-20X is a heavy-duty antenna, fully IP67 waterproof external M2M antenna for use in telematics, transportation and remote monitoring applications.

The Spartan is unique in the market because it combines a 3in1 GPS/GLONASS, Cellular (2G and 3G) and Wi-Fi, heavy-duty antenna with high efficiency in a compact format. The antenna screws down permanently onto a roof or metal panel and can be pole or wall-mounted with a metal bracket. For industries such as commercial vehicle telematics, remote monitoring, smart meter systems and construction equipment, the spartan provides a robust, rugged antenna that is durable, even in extreme environments. All while still maintaining 20dB isolation between antennas. It uses high-shielded PTFE dielectric ultra-low-loss cables that maintain lowattenuation at all frequency bands, with an average 0.3dB per meter (0.1dB per foot), compared to 0.7dB for RG58 and 1.2dB for RG174. Because of this, the Spartan maximizes chances of passing PTCRB and network approvals first time. The Spartan also has excellent GPS/GLONASS reception without need to attach to an external ground-plane due to coupling to its unique own metal base.

Specifications

Mechanical	Dimensions	Height 65.35mm±2mm x Diameter 145.6mm±2mm
	Cable Length	5000±30mm
	Casing	PC/ABS Alloy
	Connector	RP SMA Male
Environmental	Temperature	-40°C to 85°C ± 5°C
	Waterproof	IP67
	Thermal Shock	100 cycles -40°C to +80°C ± 5°C
	Shock (drop test)	1m drop on concrete 6 axes
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Ordering Information

 Item
 Specification

 TREK-ANT-501-GWH5E
 Antenna 3IN1 GSM GPRS/WIFI RP SMA(M) 5M

AD\ANTECH



Adhesive Foam

Features

- AdhesiveFoam
- IP67 Antenna
- Heavy-Duty- Integrated Metal Base/ Ground-plane

Introduction

TREK-ANT-20X is a 3 in 1 GPS-GLONASS, LTE Cellular 2G/3G/4G and Wi-Fi 2.4/5GHz antenna is a low profile, heavy-duty, fully IP67 waterproof external M2M antenna for use by RF professionals in telematics, transportation and remote monitoring applications. The Stream 3in1 is unique in the market as it combines the highest possible efficiency and peak gain for GPS-GLONASS, Wi-Fi dual-band 2.4/5GHz and all cellular bands in 2G/3G/4G in a low profile compact format for mounting via high quality first tier automotive approved 3M adhesive foam.

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Ordering Information

Item	Specification
TREK-ANT-201-GWL3E	Antenna3in1GPS-GLONASS/LTE/Wi-Fi RP SMA(M)3M



Heavy duty screw mount

Features

- Heavy duty screw mount
- IP67 compliance

Introduction

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Heavy duty screw mount

Features

- Heavy duty screw mount
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