APS-XT-GPS

Antenna Orientation and Location Sensing System

- Available as a retrofit to site-installed ANDREW and Third Party antennas
- Monitors Azimuth, Tilt, Roll, Latitude, Longitude and Elevation
- Works with AISG 2.1 controllers as an Alignment Sensor Device and Geographic Location Sensor
- Works with AISG 2.0 controllers in RET emulation mode
- Verify Installations
- Long Term Monitoring
- Additional output port for GPS signal (SMA Female connector type)

Product Classification

Product Type	RET actuator

General Specifications

AISG Input Connector	8-pin DIN Male
AISG Input Connector Quantity	1
AISG Output Connector	8-pin DIN Female
AISG Output Connector Quantity	1
GPS Output Connector	SMA Female
GPS Output Connector Quantity	1
Azimuth Note	Accuracy may be affected by installation environment and satellite visibility
Azimuth, nominal	±2.5°
Color	Gray
Elevation	±5 m
Latitude	±5 m
Longitude	±5 m
Roll	±1°
Tilt	±1°

Dimensions

Height	99 mm | 3.898 in
Width	325 mm | 12.795 in
Depth	166 mm | 6.535 in

Electrical Specifications

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GPS Antenna Gain	31±1 dB @ +25 °C (typical) | 31±4 dB @ -40 °C to +70 °C (typical)
GPS Frequency Band	1575.42 ±5 MHz
GPS Input Voltage, dc	3.8-5.5 Vdc (dual power supply)
GPS LNA Output 1dB Compression Point	≥0 dBm
GPS Current, dc	≤ 30 mA
GPS Noise Figure	1.9 dB typical | 2.5 dB maximum
GPS Out of Band Rejection	>35 dB @ 1575 ±50 MHz | >50 dB @ 1575 ±100 MHz
GPS Passband Ripple	≤1 dB @ 1575.42 ±1.023 MHz, typical | ≤2 dB @ 1575.42 ±5 MHz, typical
Input Voltage	10–30 Vdc
Boot Time	15 s
Boot Time Note	Exceeds AISG 2.0 and 2.1 requirements
Electromagnetic Compatibility (EMC)	CFR 47 Part 15, Subpart B, Class A | EN 55022 | EN 55032 | EN 61000-4-2 | EN 61000-4-3 | EN 61000-4-4 | EN 61000-4-6
Interface Protocol Signal	RS-485
Lightning Surge Capability Test Method	IEC 61000-4-5
Lightning Surge Capability Waveform	1.2/50 voltage and 8/20 current combination waveform
Lightning Surge Test Mode	Common mode
Power Consumption, maximum	3 W
Power Supply	AISG (compliant with AISG 2.1 ASD and GLS, exceeds AISG 2.0 RET)
Protocol	3GPP/AISG 2.0 compliant

Material Specifications

Material Type	ASA

Environmental Specifications

Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative Humidity	Up to 95%, non-condensing
Climatic Sequence Test Method	IEC 60068-2-14
Cold Exposure Test Method	IEC 60068-2-1
Corrosion Test Method	IEC 60068-2-11, Test Condition Ka | IEC 60068-2-52, Test Condition Kb
Damp Heat Exposure Test Method	IEC 60068-2-30, Test Condition Db
Heat Exposure Test Method	IEC 60068-2-2
Ingress Protection Test Method	IEC 60529:2001, IP56

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Packaged Product Shock Test Method	ASTM D4169 | GR-63-CORE, Section 4.1.1
Rain Simulation Test Method	IEC 60068-2-18, Test Condition Ra, Method 1
UV Resistance Test Method	IEC 60068-2-5, Test Condition B
Vibration Test Method	ASTM D4169 | IEC 60068-2-6

Packaging and Weights

Weight, net	1.5 kg | 3.307 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant