



- The ACU-A20-SR Antenna Control Unit (ACU) is part of the complete RFS AISG compliant Optimizer RT® remote antenna control system. The ACU-A20-SR has a smaller mounting footprint than previous ACUs. This is important for multi-band antennas with several internally mounted ACUs.
- The Optimizer RT® remote antenna control system permits accurate antenna tilt operations to be conducted - without riggers or crane equipment - either from the tower base or the network management center.



FEATURES / BENEFITS

- Compliant with AISG standards
- Enables remote electrical tilt of antennas
- Smaller footprint than the ACU-A20-S

Technical features

GENERAL SPECIFICATIONS

| | | |
|----------------------|--|--|
| Product Type | | Antenna Control Unit |
| Configuration | | Optimizer RT® Antenna Control Unit (ACU) for AISG2.0 |
| Applications | | Wireless Communication |
| Firmware | | Remotely upgradeable (including AISG2.0) |
| Standards | | RoHS Compliant and CE Compliant: Directive 1999/5/EC Radio Equipment and Telecommunication Terminal Equipment and the mutual recognition of their conformity, Directive 2006/95/EC Electrical Equipment designed for use within certain voltage Limits, Directive 2002/95/EC for the Restriction on the use of Hazardous Substances (RoHS) in electrical and electronic equipment. |

MECHANICAL SPECIFICATIONS

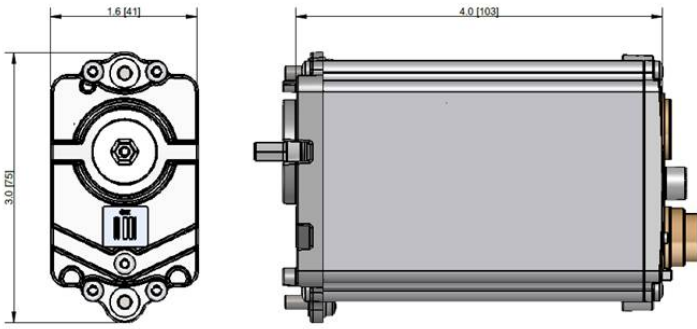
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|--|---------|---|
| Connectors | | AISG DIN female & AISG DIN male, ready for daisy-chaining |
| Weight | kg (lb) | 0.57 (1.25) |
| Temperature Range | °C (°F) | -40 to 70 (-40 to 158) |
| Mounting | | Directly onto antenna |
| Dimensions, H x W x D | mm (in) | 103 x 41 x 75 (4 x 1.6 x 3) |
| Housing | | Aluminium, with extruded body and molded end caps |
| Mounting Screw | | M4 |
| Motor Type | | Stepper |
| Continuous Torque | Nm | 0.15 |
| Angular Resolution for Shaft Turn | | Less than 0.5 turn (< 0.2 degree as tilt angle) |
| Lifetime | | 36,000 antenna adjustments |

TESTING AND ENVIRONMENTAL

| | | |
|---------------------------|--|----------------|
| Ingress Protection | | IP34 (mounted) |
|---------------------------|--|----------------|

ELECTRICAL SPECIFICATIONS

| | | |
|-------------------------|-------------|----------------------------------|
| Nominal Current | mA | 50 (stand-by), 300 (during tilt) |
| Ripple and Noise | mVpp and mV | 20 (stand-by), 40 (during tilt) |

**External Document Links****Notes**

- Radiated emission in the semi anechoic chamber: EN 55022 (1998), with the limits class B specified in the EN 300386 V1.3.3 (2005)
- Radiated emission in the semi anechoic chamber: FCC part 15
- Conducted emission on the data cable: EN 55022 (1998), with the limits class B specified in the EN 300386 V1.3.3 (2005)
- Immunity to electrostatic discharges: EN 61000-4-2, {with the acceptance criteria B for the levels specified in the EN 300386 V1.3.3
- Immunity to radiated electromagnetic field: EN 61000-4-3, with the acceptance criteria A for the levels specified in the EN 300386 V1.3.3
- Immunity to radiated electromagnetic field : AISG1.1 and AISG 2.0, with the acceptance criteria A for the levels specified in the AISG1.1 and AISG 2.0
- Immunity to fast transient signals in bursts on the cable: EN 61000-4-4, with the acceptance criteria B for the levels specified in the EN300386 V1.3.3
- Immunity to surges (lighting protection): EN 61000-4-5, with the acceptance criteria B for the levels specified in the EN 300386 V1.3.3