

General Description

The ACU-A20-N Antenna Control Unit is part of the AISG compliant Optimizer® RT remote control system.

The Optimizer® RT remote 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.



ACU-A20-N

Electrical Specifications

Compliance	AISG Standard V2.0
Supply voltage, VDC	10-30
Nominal Current, mA	< 50 (stand-by) < 300 (during tilt)
Ripple and noise	20 mVpp (stand-by) mode 40 mV during tilt

Two AISG connectors (male and female) ready for daisy-chaining

Firmware remotely upgradeable (including AISG 2.0)

Compliance to standards:

Compliant to CE requirements for CE marking

EMC directive 89/336/EEC, amended by directives 93/31/CEE and 93/68/EEC

Safety standard EN60950-1 (2001)

Compliant to following EMC standards :

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: AISG 1.1 and AISG 2.0, with the acceptance criteria A for the levels specified in the AISG 1.1 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 EN 300386 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

Compliant to Directive 2002/95/EC, for the Restriction on the use of Hazardous Substances (ROHS) in electrical and electronic equipment

Mechanical Specifications

Dimensions, mm (in)	103 x 52 x 90 (4 x 2 x 3.5)
Weight, kg (lb)	0.47 (1.04)
Operation Temperature, °C (°F)	-40 to +70 (-40 to +158)
Housing	Aluminium, with extruded body and molded end caps
Mounting screws	M4
Motor type	Stepper
Continuous torque, Nm	0.15
Angular resolution for shaft turn	< 1/2 turn (< 0.2 degree as tilt angle)
Water protection	IP 34
Lifetime	36,000 antenna adjustments