



U-Antenna Tracker Specification

version 1.0 2018/04/26

Mechanical (Box)

Dimensions (WxHxL).....75 x 105 x 170 mm ¹
Weight.....2 kg
Connectors.....3 Amphenol MIL-DTL-26482 Serie I, PT

Mechanical (Rotator)

Dimensions (DxH).....186 x 263 mm
Weight.....3.5 kg
Rotation Torque.....600 kgf-cm
Braking Torque.....3000 kgf-cm
Rotation Range.....450 degrees
360° Rotation Time..... 63 seconds at 50 Hz
..... 51 seconds at 60 Hz
Rotational Speed.....0.1 rad/s
Maximum Payload weight.....10 kg (pole-mounted)^{2 3}
.....K = 100 (tower-mounted)^{4 5}
Maximum Continuous Duty.....3 minutes

Electrical (System)

Supply Voltage..... 220-240 VAC, 50-60 Hz
Power Consumption.....1.2 W (typ)
Maximum Temperature Range.....-30 °C to +85°C
Recommended Temperature Rating.....+10 °C to +60°C

Electrical (Rotator)

Power supply.....11-24 VAC
Power consumption (in movement).....25 W
Operating Temperature Range.....-20°C to + 80°C

Interface with Peripherals

TTL Serial InterfaceComms with U-Ground
External ADC channel. 1 channel to read analog feedback from rotator

Hardware Architecture

TechnologyBased in Altera FPGA technology
Access to peripherals.....Dedicated Hardware
CPUNIOS II soft-core at 50 MHz

1 Excluding connectors in front panel.
2 To know how a pole-mounted antenna looks, please read U-Antenna Tracker User Manual, Mechanical Structure section.
3 Although the rotator is capable of holding such weight, Airelectronics provides a tripod within the Installation Kit which sets a limitation of 5 kg for pole-mounted antennas installed onto the rotator. A stronger tripod is provided separately.
4 To know how to calculate "K" coefficient, please, read U-Antenna Tracker User Manual, Mechanical Structure section.
5 Although the rotator is capable of holding such weight, Airelectronics provides a tripod within the Installation Kit which sets a limitation of K = 50 units for tower-mounted antennas installed onto the rotator. A stronger tripod is provided separately