**sat-nms ACU-RMU-NEC - Rack Mount Unit Antenna Controller**

The **sat-nms** ACU-RMU-NEC is a complete and compact 6RU 19" rack-mount chassis antenna controller with optional high performance tracking. It can be used as a cost-efficient antenna position controller or as a fully featured antenna step-track system. The system is based on the **sat-nms** ACU-ODM Outdoor Module and includes three motor-driver units. All interfaces to the satellite ground station antenna are accessible via connectors matching and compatible with connectors of NEC ACU-Connectors at the rear panel of the 19" chassis, so that it is easy to be integrated.

The **sat-nms** ACU-RMU-NEC can not only be used to point your antenna precisely to the satellite but also with the option to perform highly accurate step-tracking, adaptive tracking including orbit prediction.

The **sat-nms** ACU-RMU-NEC includes:

- Three independent and flexible motor-drive interfaces allowing simultaneous driving of all 3 axes with 3-phase frequency inverters (Az. and El.) up to 3kW (larger power available in other mechanical configurations) and solid state relays (Pol.)

- Direct Ethernet UDP Interface for **sat-nms** LBRX Beacon Receiver

- Analog Voltage Interface for 3rd party Beacon Receivers

- Resolver analog Angle Detectors Interface measuring Azimuth, Elevation and Polarization

- Optical SSI Interface high precision digital Angle Detectors as Alternative

- Analog ADC Interface to measure the Voltage across a Precision Potentiometer also available

The **sat-nms** ACU-RMU-NEC Unit includes an integrated web server and provides its operator interface via web browser. The **sat-nms** ACU-RMU-NEC includes also http and ftp for remote diagnosis and support. The system is easy to maintain. All support can be performed remotely and the interface to high-level MNC Systems is provided via Ethernet, TCP/IP, SNMP and RS232.

### Key Features

- Web-based, user-friendly Operator Interface
- Operating via Front Panel Display and Keypad
- Step-track and adaptive Tracking
- Very compact 6RU 19" rack-mount Design
- Integrated 3-phase Frequency Inverters
- HTTP and SNMP for external MNC Interface

### Contact Information

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Technical Specification

Positioning

Operational Modes *sat-nms* ACU-RMU-NEC: Manual Mode, Positioner
Operational Modes *sat-nms* ACU-RMU-NEC-T: Manual Mode, Positioner, Step Track, Adaptive Tracking, Program Track.

Position Encoding

Quantization Error

Display Position Resolution

Maximum Travel Rate of each Antenna Axis

Interfaces to Beacon Receivers

Analog Voltage Input 0 to 10V via SMA female Connector

Option Tracking Accuracy

In step-track Mode

In adaptive tracking Mode

Position Encoding

Operational Modes

Program Tracking based on time stamped file data

Number of Presets 99 storage of *sat-nms* ACU Configuration (including *sat-nms* LBRX Beacon Receiver Settings)

Interfaces

To *sat-nms* MNC Interface 10-Base-T, via HTTP GET Requests, RS232 and SNMP

Operator Access With web browser

To *sat-nms* MNC and *sat-nms* ACU-IDU Ethernet RJ45

To 4 Limit Switches Opto-Coupler Input for Azimuth, Elevation and Polarization / HAN3E Female

2 angular Detectors Resolver, SSI Input / MIL-C-5015 18-1s

Motor Driver Interface Via Opto-Coupler Inputs and Outputs: Motor on/off and direction, low and high speed selection, reset driver, driver fault for frequency inverter, DC servos etc.

Motor Interface Harting HAN6E Female with Frequency Inverter up to 3kW (AZ/EL).

Power Supply Interface Harting HAN6E Male (3ph. Motor Power) / HAN3E Male (1ph. *sat-nms* ACU-ODM)

Electrical and Mechanical Specification, Environmental Conditions

Supply Voltage 380VAC Mains Voltage 3 phase / 230VAC Mains Voltage Single Phase

Power Consumption 100W + Motor Power

Temperature Range -10° to 50°C

Humidity Up to 90% non-condensing

Dimensions 19”, 6RU, 450x270x380 mm (WxHxD)