

HILTRON

Shortform catalogue



HMAM - Hiltron Motorised Antenna Mount

High Speed Three Axis Antenna Mount

High precision satellite antenna positioner *for use* in *professional satellite communication systems*.

Combining *affordability* with the *reliability* and *precision* expected from *professional-grade communications equipment*.

FEATURES

- Different models for reflectors with a diameter between 1.2 and 5.0m.
- Three axis motorized system with max. 240° of continuous azimuth movement, 90° Elevation range.
- Extended range on request.
- Fully adjustable polarization.
- Positioning accuracy is up to +/- 0.01° (depending on model and wind load).
- IP-based control from a PC with standard web browser.
- Integrated database for storage of potentially accessible satellites.
- Ethernet interface and control via SNMP for M&C.
- ACU and associated motor-control electronics are contained within a weatherproof outdoor housing.
- Motorized feed changer (C / X / Ku / Ka) on request.
- Remote switchable polarizer (linear / circular) on request.



HMAM-PM – Hiltron Motorised Polarmount Antennas

High Quality Cost-effective Polarmount

Fast and precise positioning with robust design – the prime choice for monitoring, program acquisition, occasional use transmissions and automated backup.

FEATURES

- Complete package with 1.8m or 2.4m offset antenna and ACU.
- Max. 30s to any Sat-position.
- Rapid deployment. Preassembled & prewired, installation in less than 2h.
- IP based control, integrated Web GUI for standard web browsers. Ethernet interface and SNMP for M&C.
- Coarse and fine adjustment for polar axis and declination.
- POL-drive +/- 95° (optional).
- Fully integrated deice system with configurable temperature and current monitoring (optional).
- LNB power supply and monitoring (optional).
- High precision and speed positioning due to low backlash gear drive and 17bit absolute encoder.





High precision satellite antenna control unit *for use*
in *professional satellite communication systems.*

HACU - Hiltron Antenna Control Unit

Precise Positioning and Satellite Tracking

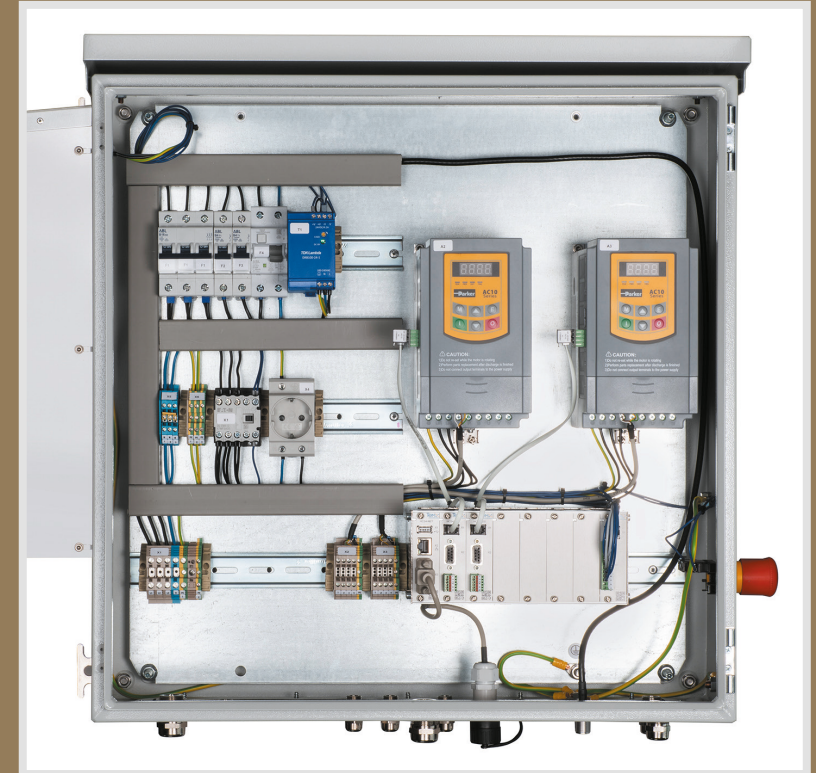
High precision satellite antenna control unit *for use*
in *professional satellite communication systems*.

FEATURES

- ACU for positioning of up to four axis motorized antenna systems.
- All axis can be controlled and moved simultaneously.
- Fast positioning with three different speed settings.
- Integrated database for storage of accessible satellites.
- IP-based control from a PC with standard web browser.
- Ethernet interface for monitoring and control via SNMP.
- Serial interface for system extensions, e.g. wind sensor.

OPTIONS

- Software for satellite tracking system including inclined orbit:
Steptrack, Program track,
Prediction tracking.
- Interface for 17 to 22bit optical SSI encoders.
- Integrated deice control unit (DCU) with temperature and rain sensor.
- Integrated LNB supply and monitoring module.
- Integrated beacon receiver or integral control for 3rd party beacon receiver.
- Rackmount 10" touchscreen remote panel.
- Handheld controller.



HRMU - Hiltron Redundancy & Monitoring Unit

Reliable Redundancy Switching System

The Hiltron Redundancy & Monitoring Unit HRMU is a *modular system* managing *different applications* for *satellite earth stations*.

It is *designed* for *any kind of equipment*, as for example LNA, LNB, BDC, BUC, HPA.



FEATURES

- Available for many frequency bands and equipment vendors.
- Redundancy control function with automatic switch-over to the standby/off-line unit triggered by external signal and configurable thresholds for voltage, current and signal strength.
- Monitoring and control of voltage and current with configurable voltage and current thresholds including shortcut detection.
- Detection of RF level with monitoring of L-Band signal strength with configurable thresholds.
- Variable DC power is provided for the BUC/BDC, LNA/LNB units.
- LNB functional control by settable voltage and 22kHz tone up to 6 Bands for each polarization.
- Included bias-T for 10MHz reference signal.
- Detection of RF level with monitoring of L-Band signal strength with configurable thresholds.
- Variable DC power is provided for the BUC/BDC, LNA/LNB units.
- LNB functional control by settable voltage and 22kHz tone up to 6 Bands for each polarization.
- Included bias-T for 10MHz reference signal.

HRMU – Hiltron Redundancy & Monitoring Unit

Reliable Redundancy Switching System



UNIT TYPES / APPLICATIONS

N:1 BUC / LNA / LNB redundancy unit – full outdoor

- Waveguide switching system.
- Outdoor controller (HCS) in IP65 outdoor cabinet for hub installation.
- BUC / LNB / LNA power supply. Optional 10 MHz distribution.

N:1 BUC / LNA / LNB redundancy unit – indoor controller

- Waveguide switching system.
- Rack mounted indoor controller (HCS), can be shared by more antennas.
- Additional control cable between indoor / outdoor required.
- BUC / LNB / LNA power supply.
- Optional 10 MHz distribution.

N:1 fiber optic LNB redundancy unit

- Waveguide switching system.
- Outdoor controller (HCS-master) in IP65 outdoor cabinet for hub installation with integrated LNB power supply unit.
- Indoor controller (HCS-slave) rack mounted design for the L-Band switching. Can be shared by more antennas.
- Ethernet over fiber between indoor / outdoor.



The Hiltron Redundancy & Monitoring Unit HRMU
is a *modular system* managing *different applications*
for *satellite earth stations*.

HTOOL-LNBS

Portable LNB Supply with GPS Stabilized 10MHz Reference

HTOOL-LNBS is a *compact* and *lightweight device* for *satellite antenna receive system commissioning, service* and *testing*.

FEATURES

- Voltage supply adjustable from 5 to 20 VDC.
- Supply current up to 600mA, current monitoring.
- Switchable 22kHz signal.
- Very stable and low phase noise 10MHz reference signal insertion.
- Built in GPS receiver for 10MHz synchronization and readout of geographical position.
- L Band output DC free.
- Wide range AC powering.



HDCU - Hiltron Deicing Control Unit

Web-based Antenna Deicing System



Combined de-icing sensor and dish heating system for direct control of small, medium or large satellite antennas.

A SMALL SELECTION OF OUR INTERNATIONAL CLIENTS

- 230V single phase or 400V three phase supply.
- Dedicated circuits for heater control to connect to the pads or fans.
- Additional circuits for feed and sub-reflector heater control.
- Heater current control and protection.
- Automatic controlled de-icing with temperature and precipitation sensors.
- Mode on / off / auto.
- Ethernet interface for M&C.
- Web based user friendly operator interface.
- Control via SNMP.



HCS - Hiltron Control System

Flexible Fully Modular Controller

Universal flexible fully modular controller (2 RU) for *monitoring, control, supply* and *redundancy* switching in *different control applications* for *satellite earth station equipment*.

MAIN FEATURES

- Three chassis types:
 - 19" 2RU, 15 free slots
 - rail mount, 13 free slots
 - rail mount, 5 free slots
- Web based user friendly operator interface (HTTP).
- Control via SNMP for M&C.
- Modbus compatible.
- All modules hot swappable.

SELECTED SLOT MODULES

- Monitoring and power supply for: LNA/BDC/LNB BUC/FO-modules.
- GPS synchronized 10MHz generator and insertion.
- Switching units.
- Positioning units.
- Communication units.

THE HCS CONTROLLER IS THE BASIS OF FOLLOWING PRODUCTS

- Hiltron Antenna Control Unit (HACU)
- Hiltron Redundancy and Monitoring Unit (HRMU)
- Hiltron De-icing Control Unit (HDCU)

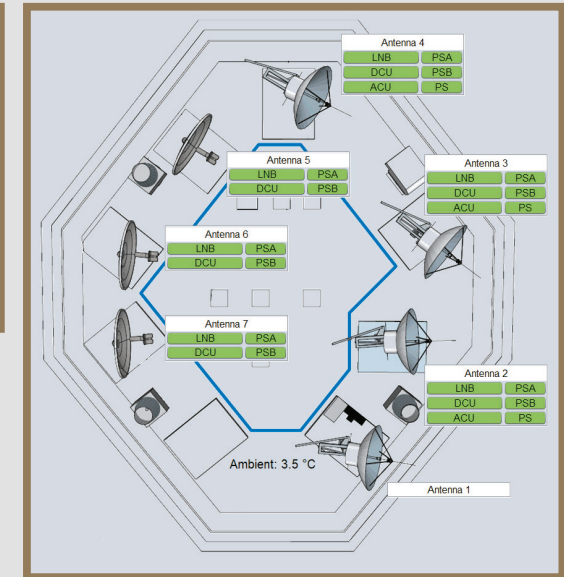
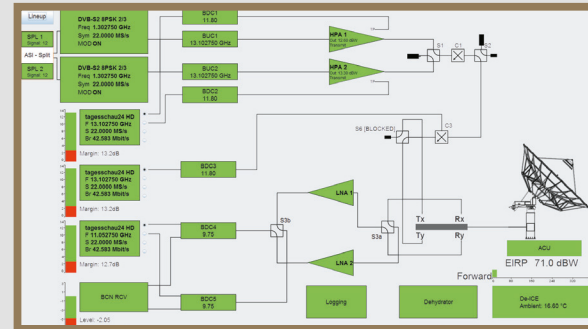


HMCS-MCR - Hiltron Monitoring and Control System

Unique Solution for Master Control Room

HMCS-MCR is a *modular* and *scalable* package of our *universal M&C System*. It is *designed to control* all *relevant satellite equipment* in your MCR, *optimized for occasional use applications*.

The application is *focused* on a *user friendly* handling of *various equipment* for *operators in master control rooms*.



FEATURES

- All relevant information at one glance.
- Management of different Encoder, Modulator and HPAs.
- Interfaces to higher-level systems (SNMP, XML).
- Platform-independent client / server system.
- Management of Tx and Rx chains including redundancy switching.
- Uniform management of different equipment same type (e.g. receivers with different firmware versions).
- Selection and storage of different satellite parameters (satellite position, beacon frequency, transponder/slots etc.) database supported.
- Database supported profiles for satellite reception (IRD settings).
- Database supported profiles for satellite transmission (Modulator, Encoder, HPA settings).
- Plausibility check and control (in case of wrong parameter settings).
- Matrix management and automatic routing.
- Management of motorized and fixed antennas.
- Customization.
- Logging of parameter and status data and graphical presentation.
- Logging of all processes, alarms, events.

HMCS-SNG

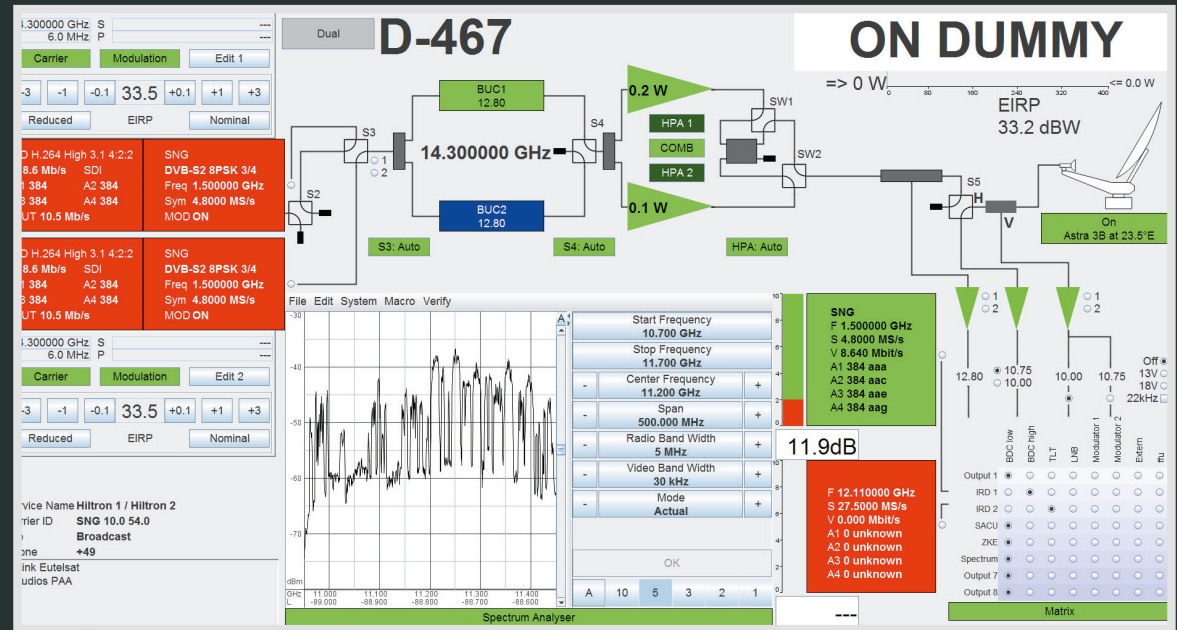
Ultimate Solution for SNG Tx/Rx System Operation



HMCS-SNG is an *adapted version* of Hiltron's *universal M&C system*. It is *designed to control and integrate* the *complete Tx and Rx chain equipment* of a *SNG vehicle*. *Developed in close cooperation* with *SNG operators* and *in combination* with the *Hiltron SACU SNG antenna controller* it is *the best SNG M&C system on the market*.

FEATURES (SELECTION)

- One page overview over configuration of complete Tx and Rx equipment.
- Redundancy and carrier switching with plausibility check.
- Internal database for satellites and transponders –choose a profile and setup encoder, modulator, receiver, HPA and spectrum analyzer for monitoring with one click.



Company Overview

Hiltron Communications operates from modern purpose-built headquarters based near Stuttgart in south-west Germany. Our on-site facilities include a purpose-designed integration area for ground systems, large antenna solutions and SNG vehicles. We also have our own satellite antenna test plant.

Customers can rely on our experience in designing system solutions using own and various multivendor products.

We offer a wide range of customer-focused services covering every aspect of the modern satellite communication business.

We invite you to contact our specialists if you have technical questions or require support in the design and selection of equipment.

FACTS ABOUT HILTRON COMMUNICATIONS:

- Founded 1979
- Located in Backnang (Stuttgart), Germany
- Own Research & Development department and production
- World leading satcom integrator and manufacturer
- ISO 9001 certified



Hiltron Communications Headquarters

“Hiltron has proved a *highly experienced* and *trustworthy partner*, providing a range of *successful solutions* and *services* to us for the *Nittedal teleport* over more than a *decade*, starting in 2010 with a *7.6 metre K-band transmit/receive antenna system*.”

Ole Martin Grønli

Senior Project Manager, Telenor Satellite AS



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