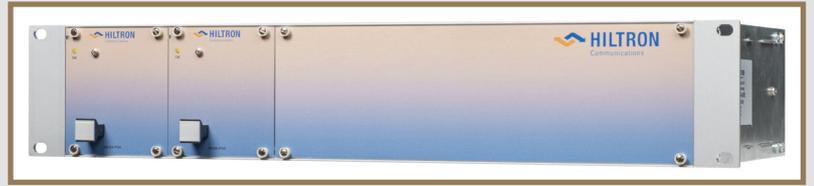


HCS – Hiltron Control System

Universal *Ultra Flexible Highly Modular* Controller for *Different Control Applications* for *Satellite Earth Station Equipment*



FEATURES

- 19"/2U chassis with redundant power supply.
- 8 & 16 slot chassis with external 24V power supply.
- Any new or replacement module recognizes which slot it is located in and registers itself under this address.
- All modules are hot-pluggable and can be exchanged easily during operation.
- Each module possesses independent functionality. The communication between the modules is maintained even when there is no network module in place.
- Web based intuitive operator interface (HTML).
- External control via SNMP.
- Serial & LAN Interface for extension.

APPLICATIONS

- Controller for N:1 redundancy HPA switching.
- Monitoring and control of SSPA's, HPA's, BUC's, UC's, Modulators.
- Controller for N:1 redundancy switching of up-converters (IF and L-Band switching).
- Monitoring, power supply, 10MHz for LNA / LNB.
- Control of redundancy systems for DVB MPEG encoders/modulators/IRD's and other applications.
- Antenna Control Unit.
- Deice Controller.
- Low phase noise redundant 10MHz station reference system.

AVAILABLE MODULES

- HCS4-Net – Module for network communication, LAN interface, controller, external modules like HF power detection or wind sensors
- HCS4-SSI – Module for antenna axis control with interface for 17 to 24bit optical SSI encoders
- HCS4-RES – Module for antenna axis control with interface for resolver transducer
- HCS4-DCD – Module for antenna axis control with interface electronic motors and monitoring with resistive sensors
- HCS4-PSD – Module for DC power supply, e.g. used in chassis with 8/16 slots
- HCS4-PSA – 230VAC Power Supply for 19"/2U chassis.
- HCS4-DCU – Module for antenna deice control with 2 separate high load (20A) circuits and additional feed heater circuit for 24V or 230V
- HCS4-10M – 10MHz reference source with internal (via BUS) and external signal distribution. Free run or synchronization from GPS or external sync.
- HCS4-EXT – Module with serial interface, power supply for LNA's, monitoring and control of HPA's, SSPA and other equipment
- HCS4-SWI – Module for monitoring and control for WG and Coax Switches
- HCS4-LST – Module with integrated transfer switch
- HCS4-DBT – Dual Bias T Module for LNB power supply, 10MHz insertion, RF level det.
- HCS4-L21 – Module for 2:1 L-Band redundancy switching

Since 1996 Hiltron has been manufacturing control units for SatCom equipment and for industrial M&C applications. Maintaining the reliability and functionality of the HCS-3, the HSC-Control System forms the central control element for a wide range of satcom applications. The HCS – Control System is available as a 2U high 19 inch rack mount unit with main and backup power supplies plus 15 slots for active modules. Also available are two chassis mountable frames accommodating up to 6 or up to 14 active modules respectively.

HCS - Hiltron Control System

SPECIFICATION FOR THE HCS-CONTROL SYSTEM (19"/2U CHASSIS)

Application: Monitoring & Control of switches, LNBS, HPA, Antenna Control units, Antenna Heating systems etc.

Interfacing card modules: HCS.NET, HCS.SSI, HCS.RES, HCS.DCD, HCS.DCU, HCS.PSD, HCS.PSA, etc.

Module handling: Hot swappable

Electrical

Power Supply: Redundant
 - Power Requirements: 95 – 245 VAC, 47 – 63 Hz, PFC
 - Power Consumption: Max. 1A at 230V (depending on configuration)
 - Max. output power: 90 W

Monitoring & Control

Remote Control: Web Interface TCP/IP, RJ45 10/100 Base-T, SNMP

Interfaces: Ethernet / IEEE802.3U
 - LAN interface: Data transfer rate: 10/100 Mbit/s
 - RS422 interface: Connector: RJ45
 Communication: Web / SNMP
 Type: RS422
 Connector: Sub-D 9 m
 Baud rate etc.: configurable

Mechanical / Environmental of the 19" rack-mountable version:

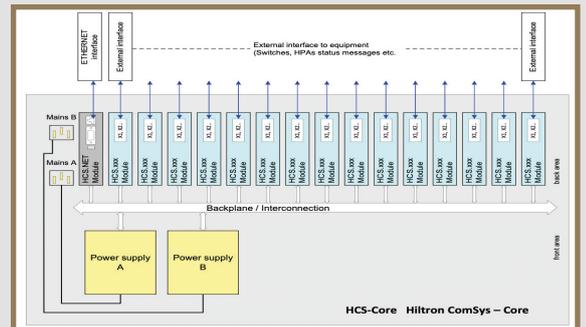
Size: Width: 19" rack-mountable
 Height: 89 mm (3.5", 2U)
 Depth: 500 mm (20", including connectors)

Weight: Max. 10.5 kg

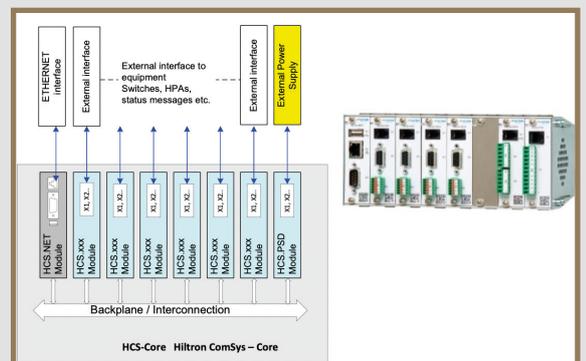
Temperature:
 - Operating: 0°C to +50°C
 - Non-operating: -20°C to +80°C

Humidity:
 - Operating: 5% to 95% non-condensing
 - Non-operating: 0% to 100% non-condensing

CE safety: EN60950-1 / UL 60950
CE EMC : EN 55022 Class B
Emissions: EN 61000-3-2, -3
Immunity: EN 50082-1



Hiltron Control System - HCS:
 Schematic Diagram of System implemented in 19"/2U chassis with 16 modules capability



Hiltron Control System - HCS:
 Schematic Diagram of System implemented in chassis with 8 and 16 modules capability

