

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



Features

- ▶ 19"/2U chassis with redundant power supply,
- ▶ or small chassis option 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 user-friendly operator interface (Web Interface HTTP).
- ▶ Control via SNMP for M&C.
- ▶ Serial Interface for extension.

Applications

- ▶ Controller for N:1 redundancy HPA switching.
- ▶ Monitoring and control of SSPAs, switches.
- ▶ Controller for N:1 redundancy switching of up-converters.
- ▶ Monitoring and power supply for LNBs.
- ▶ Control of redundancy systems for DVB MPEG encoders/modulators/IRDs and other applications.
- ▶ Monitoring and control of antennas.
- ▶ Monitoring and control of antenna heating.

Available Modules

- ▶ HCS.NET - Module for network communication, LAN interface, controller.
- ▶ HCS.SSI – Module for antenna control with interface for 17 bit optical SSI encoders.
- ▶ HCS.RES – Module for antenna control with interface for resolver transducer.
- ▶ HCS.DCD – Module for control of electronic motors and monitoring with resistive sensors.
- ▶ HCS.DCU – Module for antenna heating control.
- ▶ HCS.PSD – Module for DC power supply, e.g. used in chassis with 8 slot.
- ▶ HCS.PSA – Power Supply for 19"/2U chassis.
- ▶ HCS.EXT – Module with serial interface, power supply for LNAs, monitoring and control of HPAs, SSPA and other equipment (e.g. up-converter).
- ▶ HCS.SWI – Module for monitoring and control of WG- and coax-switches.
- ▶ HPA.LST – Module with integrated L-band transfer switches.

Since 1996 Hiltron has been manufacturing control units for SatCom equipment and for industrial control & monitoring applications. One of the main products is the Controller HCS3 with its unique features. The existing design has been upgraded to a new controller generation ComSys-Core with additional new features.

The new generation combines all the previously available systems in a base system ComSys-Core. Depending on the different applications a variety of modules are available to be integrated into a functional unit. There are two types of chassis available, the 19"/2U equipped with up to 16 modules (16 slots) and a small chassis equipped with up to 8 modules (8 slots) suitable for cabinet installation.

Specification for ComSys-Core (19"/2U Chassis)

General

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:
 - LAN interface: Ethernet / IEEE802.3U
 Data transfer rate: 10/100 Mbit/s
 Connector: RJ45
 Communication: Web / SNMP

- RS422 interface: Type: RS422
 Connector: Sub-D 9 m
 Baud rate etc.: configurable

Mechanical / Environmental

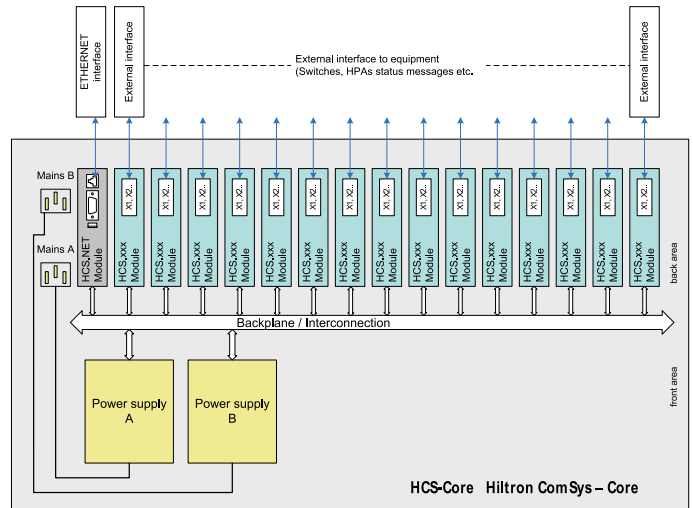
Size: Width: 19" rack-mountable
 Height: 89 mm (3.5", 2U)
 Depth: 500 mm (20", including connectors)

Weight: max. 10.5 kg

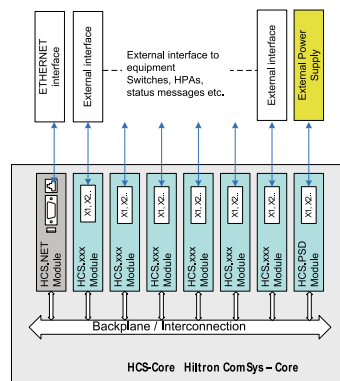
Temperature:
 - Operating: 0°C to +50°C
 - Non-operating: -20°C to +80°C

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 ComSys-Core:
 Schematic Diagram of System implemented in 19"/2U chassis with 16 modules capability.



Hiltron ComSys-Core:
 Schematic Diagram of System implemented in chassis with 8 modules capability.