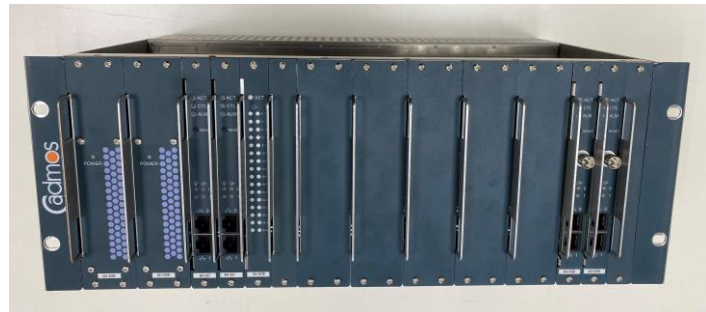


Radar Head Concentrator RHC

Media Switch RHC
Drawer P/N 804-098

Highlights

- **Up to 32/16 digital inputs** Integration with legacy systems
- **Double 2 NTP Clock cards;**
 - NTP stratum1 clock
- **4 x 10 10/100 Base-T Ethernet ports** dedicated to NTP clock distribution (bonding support)
- **4 x 10 10/100 Base-T Ethernet ports** dedicated to the data inputs remoting and configuration (bonding support)
- **SNMP V1 and V2C compliant:**
 - Network Details (IP address, mask, etc.)
 - SNMP Details (traps, system information, etc.),
 - Input output details
- **Hot-swap**
all boards are designed with hot-swap capability.
- **Fully compatibility with on field installed systems**, both for
 - communication protocol with remote control centre,
 - input/output types,
 - cable heading.
- **Multiplex features**, remoting serial ports (data and criteria) and making long distance connections by Ethernet or Fiber;



The Radar Head Concentrator (RHC) combines three different units within the same system: the Controls, Alarms and Telesignals (CAT) and the NTP Clock Server unit.

The **RHC unit** is equipped with specific cards designed to manage and control digital inputs, alarm signals, and output signals. It can:

- Manage up to 32 digital input lines, up to 16 opto-coupled inputs lines
- Manage serial input lines to interface RS-232, RS-422 or RS-485 serial devices with MODBUS protocol
- Operate in compatibility with existing installed systems

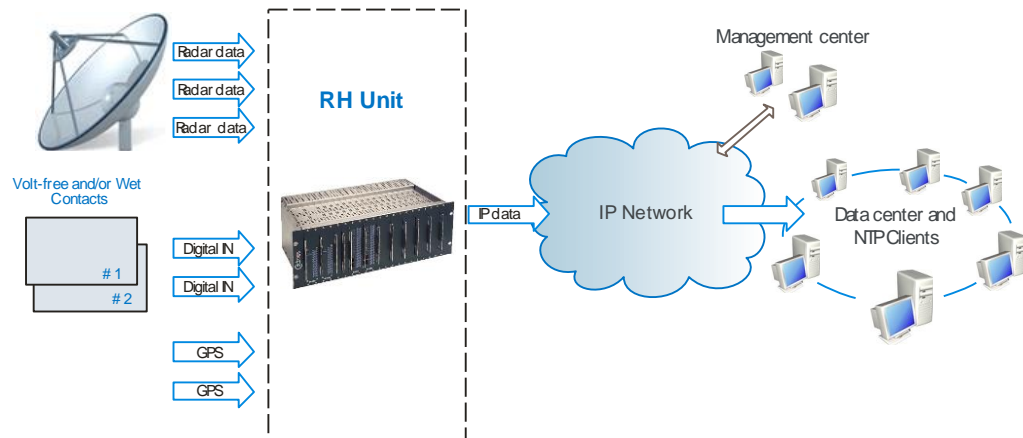
Integrate advanced remote-control functions by FTP, WEB server, SNMP or proprietary NMS.

The RHC unit can be equipped up 2 specific cards to act as an NTP Clock server, performing accurate time to networks. This equipment is reference clock (Stratum 1 mode) for network NTP clients.

There are 11 slot free to future expansions.

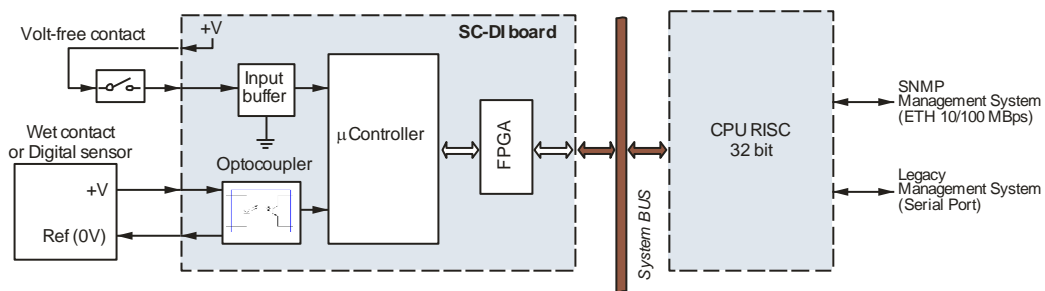
Typical applications

Typical application of the RHC unit is as a control and communication device for radar sensor. For this application the RHC unit is installed in the same premises where the radar sensor is located.



Radar premises installation

External device connections



Unit features

Flexible design and consistency

The unit flexible functional architecture allows its use in several different operative scenarios. In each condition the RHC can be tailored to the actual needs.

The unit is made up of max 11 cards:

- 2 CPU Cards to control/configure the drawer and data input remoting.
- 2 inputs cards to for remote logging
- 5 ATC router cards (optional)
- 2 NTP Clock server cards

On request the drawer can be configured to others cards such as 4 NTP clock cards or more digital input cards.

The standard base line of MS-RHC unit has 11 slot free to future expansions.

Data Encapsulations

The clock data distribution via LAN a NTP protocol.

The digitals inputs are remoted via SNMP protocol ver. 1 and 2C.

The unit manages data exchanged between serial devices and/or Ethernet LAN, by using different encapsulation protocols.

Each section interfaces the serial remote device by using the relevant protocol. Data are extracted and can be addressed to another serial or Ethernet port of the same board (with the same protocol) or a serial/Ethernet port of another board. In the latter case, a different protocol can be used.

Reliability and Maintainability

RHC units plus are:

- *high reliability*; the state-of-the-art architecture and components are designed to achieve a high MTBF, and all its parts can be redundant, to avoid any possible breakdown;
- *optimized maintainability*, with redundant modules hot-swap interfaces, thus obtaining an extremely low MTTR (Mean Time to Restore) and a network down time close to zero (99.9999% availability).

Technical Specifications

Operational:

The unit manages several functions:

- digital inputs remoting
- redunded NTP clock server
- serial-to-serial,
- serial-to-ethernet,
- switching/tunneling.

Cards:

- 804-002 PSU
- 804-095 NTP clock card
- 804-097 Digital input card
- 804-099 CPU card
- 804-100 Router card (optional)
- 804-101 Digital output card (optional)

Serial port characteristics:

Serial ports can be set for different type, standard, baud rate or timing:

- Synchronous / asynchronous
- Baud rate or timing are user configurable (internal clock generator available)
- ITU-T standard: V.24, V.36 or V.11 (X.21)

Remote setting:

Via WEB server.

Environment data:

Operation temperature: 0° +70°, military -40° +85°

Operation humidity: max. 85 % (non-cond.) at 30°C

Storage temp. -40 °C to +85 °C

RoHS compliant (lead-free)

MTBF

>500.000 hours for each data channel
(MIL-HDBK-217F Part stress)

Power distribution

Power distribution relies on two power supplies, in redundant configuration

Mains:

Typical: 220 Vac / 50 Hz

Max range: 90 to 264 Vac

Power consumption:

0.16A (max configuration)

For more information about our products, please visit

www.cadmos.it

or contact us at

info@cadmos.it



Cadmos Quality Management System is
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