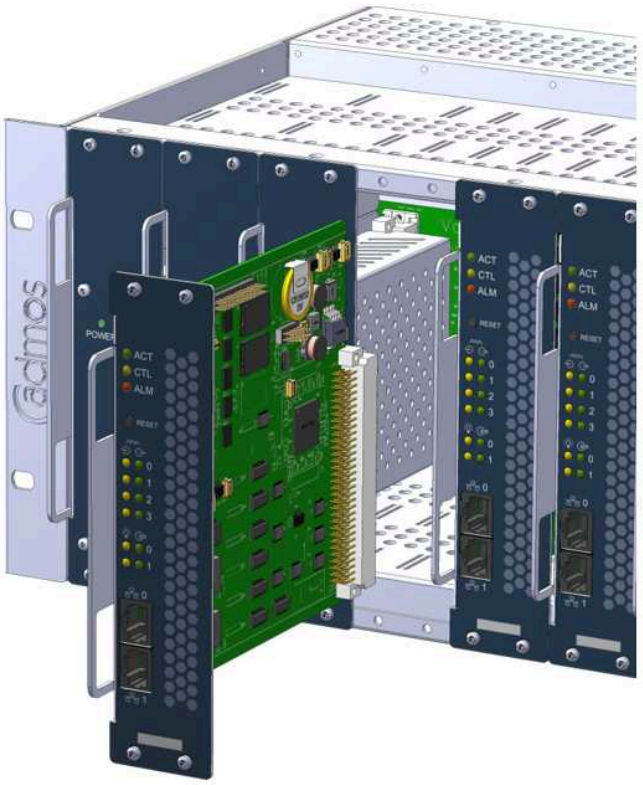
reliable technologies

Media Switch
RHC Drawer

All radar data in one flow



Highlights

- **Digital inputs integration** with legacy systems
- **Double NTP Clock cards**
- **SNMP V1** and **V2C compliant**
- Fully **compatible** with on field installed systems
- **Hot-swap** capability
- **Multiplex** features
- **Short and long distance** remoting serial ports
- **Scalable** and **expandable**

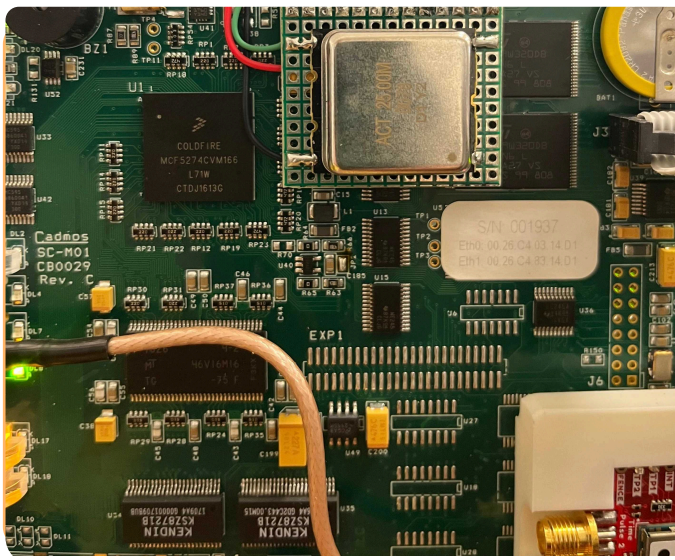
PRODUCT OVERVIEW

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 specifics cards designed to manage and control digital inputs, alarm signals, and output signals.

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.

OPERATIONAL CONCEPT

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.



FLEXIBLE DESIGN

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 11 cards:

- 2 CPU Cards to control/ configure the drawer and data input remoting.
- 2 inputs cards to for remote logging
- 4 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.

ENCAPSULATIONS

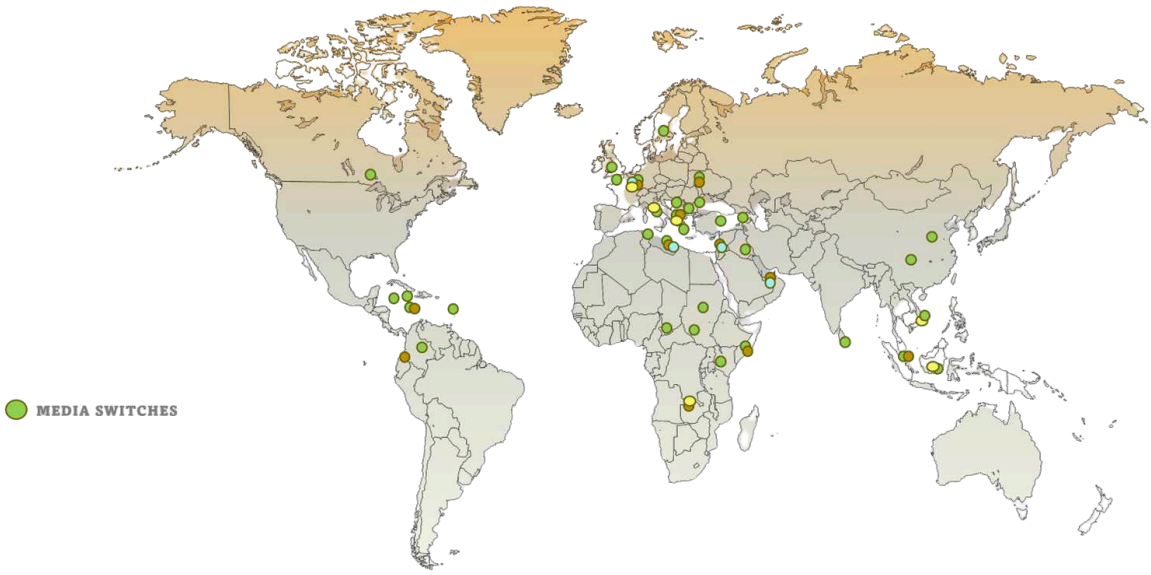
The clock data distribution via LAN a NTP protocol; the digitals inputs are remoted via SNMP protocol ver. 1 and 2C.
The unit manages data exchanged between serial devices and/or Ethernet LAN, by using different encapsulation protocols.
Each section interfaces the serial remote device by using the relevant 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.

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)
Dimensions:	Height: 176 mm (4 U rack 19") Width: 482 mm (19" rack mount) Depth: 250 mm (mainframe) max size 280 mm

REFERENCES

MediaSwitches are the long time best seller of the CADMOS products, worldwide installed in several different contexts and with different third parties systems integration: a reputation based on adaptability, robustness and performances.



MediaSwitch RHC Datasheet - March 2026 - Version n. 42

RELATED SERVICES

- 1 year warranty, extendable
- Set-up and configuration
- Training
- Stock availability
- Obsolescence management
- Remote and on-site support
- Corrective and evolutive management
- Integration with third parties systems

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