NEXCON
TELECOMUNICACIONES

INTRODUCTION

Nowadays radar communication systems are based on information transfer through the IP network using UDP datagrams. ASTERIX radar traffic or DDE is transmitted in multicast, so that multiple receivers can extract this information and send in synchronous towards consoles. Current routers used in data traffic enable this functionality but with an increase in the bandwidth used.

The equipment SCRCAST-18 allows listening ASTERIX multicast traffic from the LAN and transmit in synchronous HDLC towards consoles. The equipment is completely transparent and does not modify, in any case, the received data in UDP datagrams.

This equipment along with the diffuser CDS data series, are the ideal solution for transferring data in a radar control center (ACC) or the control tower (TWR).

FUNCTIONAL SPECIFICATION

The SCRCAST-18 is a radar data receiving device (ASTERIX) that converts multicast traffic received on IP, to synchronous HDLC interfaces V24/V28 or V35.

Traffic in UDP datagrams, allows the definition of both the address and the port to use. You can configure traffic unicast, broadcast or multicast.

It has two synchronous HDLC interfaces with speeds of 9600bps, 19200bps, 38400bps, 64Kbps. and 128Kbps. Each interface may be associated with two different types of multicast traffic. In HDLC frames can be configured the address and control bytes.
The interfaces operate in DCE and V.24/V28 or V.35 and it is possible to define via switches, control signals fixedly interface (enabled or disabled).
The power supply is 100-240VAC and 50/60Hz.

In the front you can check the status of the signals from the RS232 and LAN port.
Configuration is very simple and intuitive and can be done by local console mode (front micro-USB connector), telnet, or SNMP option.
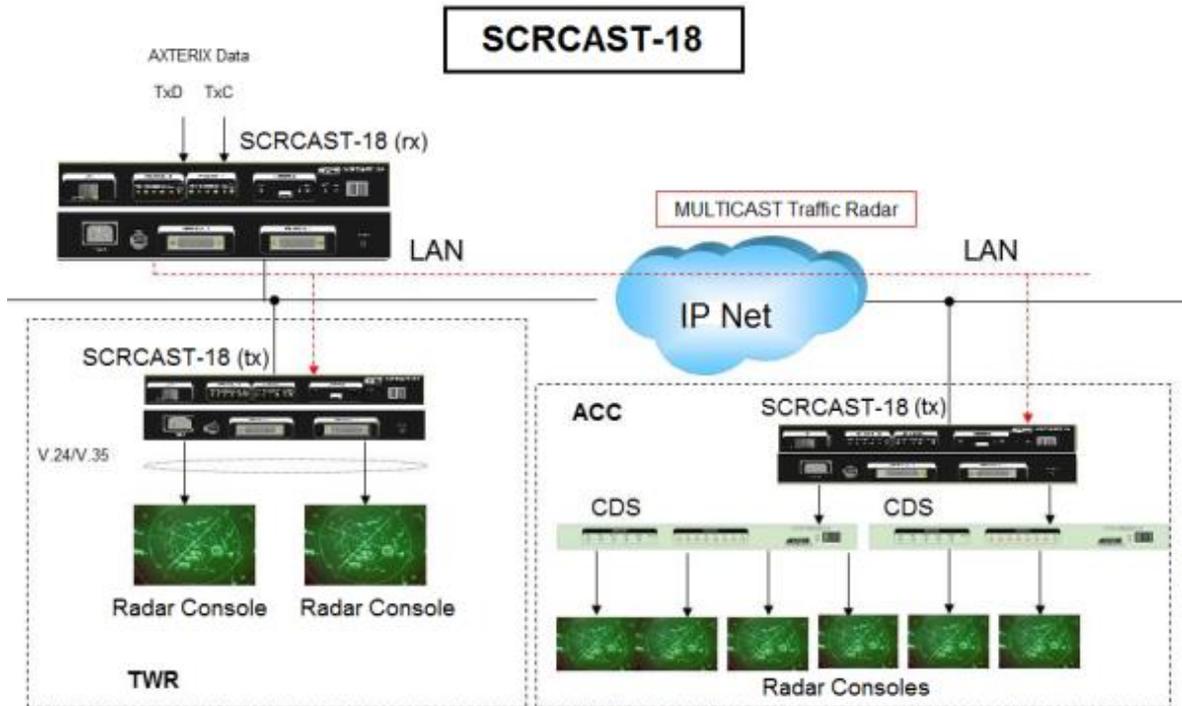
ELECTRICAL CHARACTERISTICS

Interfaces Channels 1 and 2

- V.24/V.28/V.35 interfaces in synchronous.
- Control modes by switches.
- Interface DCE.

CONSOLE Interface

- USB micro-B.
- Interface DCE.

ASYNC Interface

- V.24/V.28 interface in asynchronous DCE.
- For future use in async. conversions.

LAN Interface

- 10/100BaseT auto Operation.

Power Interface

- Power 100-240VAC 50/60Hz.
- 100-240VAC 2A removable protection fuse.

FUNCTIONAL CHARACTERISTICS

Interfaces Channels 1 and 2

- Switch configurable working modes.
    - Mode A. UDP to HDLC (tx) external clock.
    - Mode B. HDLC to UDP (rx) external clock.
    - Mode C. UDP to HDLC (tx) internal clock.
    - Mode D. HDLC to UDP (rx) internal clock.
- HDLC frame format. Configuration control and address fields.

- Fill with flags when no data.
- Speeds: 9600bps, 19200bps, 38400bps, 64Kbps or 128Kbps.

Data LAN Interface

- Configuring IP address (unicast, broadcast and multicast).
- Traffic UDP port settings.
- Supports two different IP traffic.

PHYSICAL CHARACTERISTICS

Serial Interface

- DB-25 female connectors for terminals synchronous interface V.24/V.28/V.35 DCE.

LAN interface

- RJ45 connector.

Diagnostics

- Power LED.
- Data Ports (Clock RXC and RXD data).
- Alm LED loss of channel communication.
- LAN Indications (ACT and LNK).
- System status led.

CONFIGURATION AND MAINTENANCE

- USB console or telnet.
- Optional SNMP.
- TFTP remote firmware update.