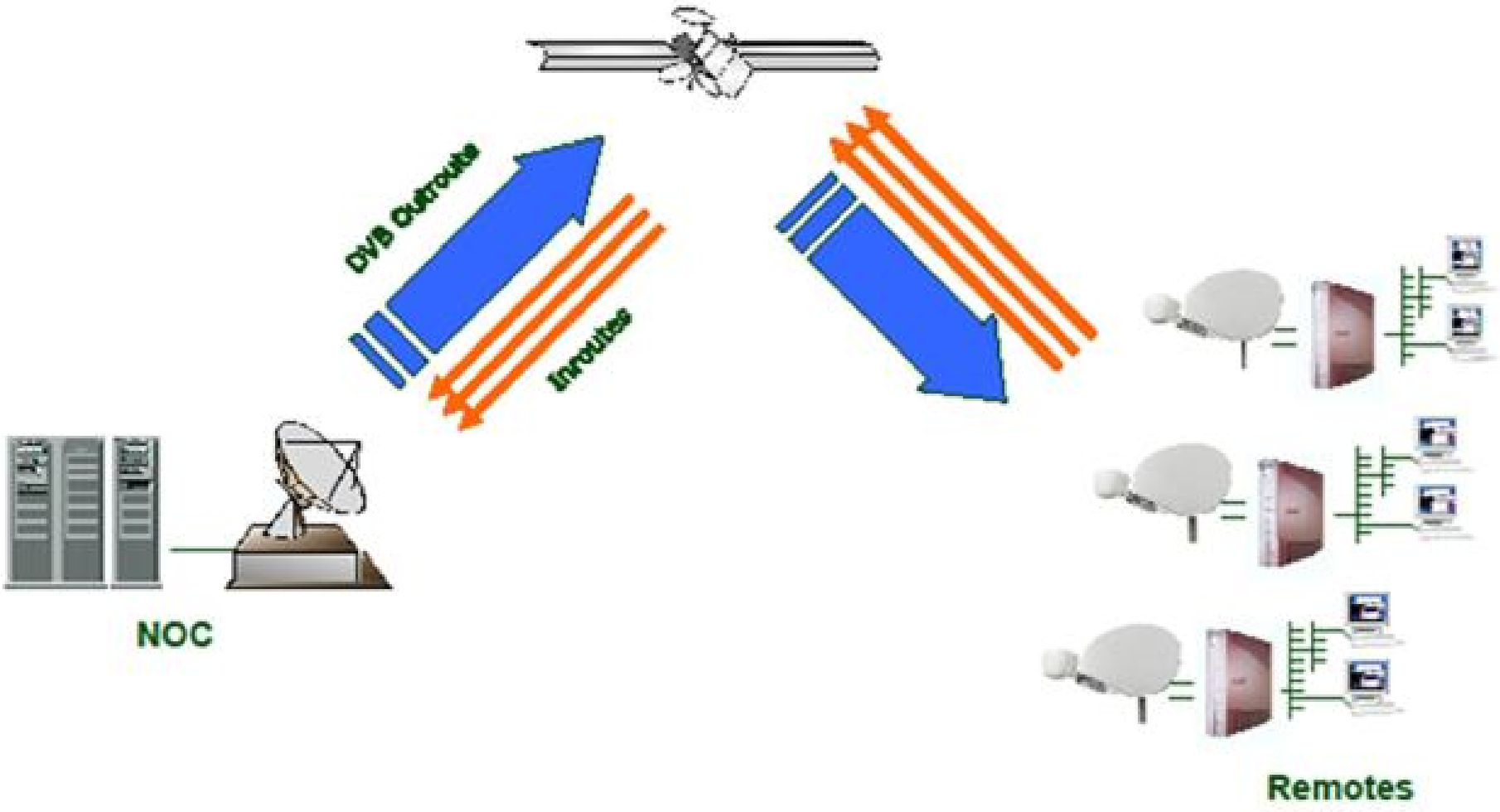
IEC TELECOM GROUP

Remote Equipment Specification

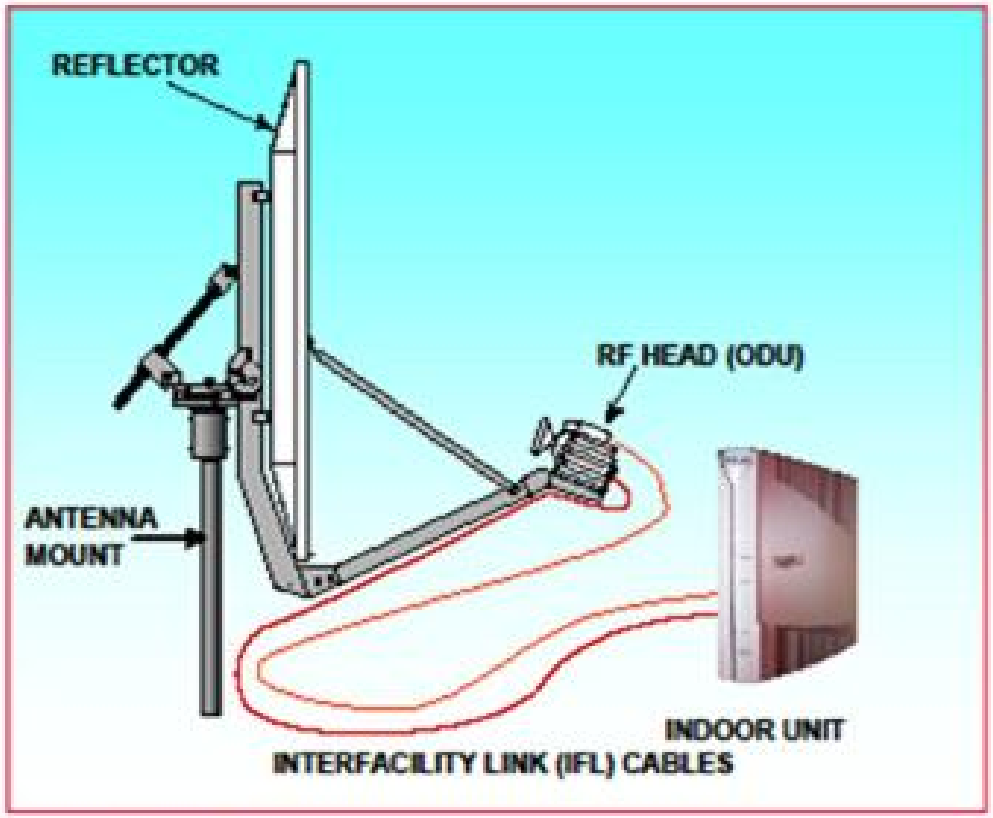
HN System Topology



HN System Topology

- The HN System offers high-speed IP satellite connectivity between the HN NOC and multiple HN remote terminals
- The HN System has two types of remote terminals
  - Remote types
    - HN9260 and HN9460
- An HN remote is a satellite router with its own embedded software
  - Multiple IP devices can connect to an HN remote for Internet/intranet access
  - The HN remote is independent of any IP devices connected to it
    - Computers connecting to the remote LAN may run any operation system, such as Windows, Unix, and Linux
- An HN remote has an embedded Web sever providing access to its system information and status monitoring
  - Basic Web access provides configuration information and status/statistics
  - Advanced Web access provides additional status/statistics as well as a commissioning utility

Remote Site Equipment



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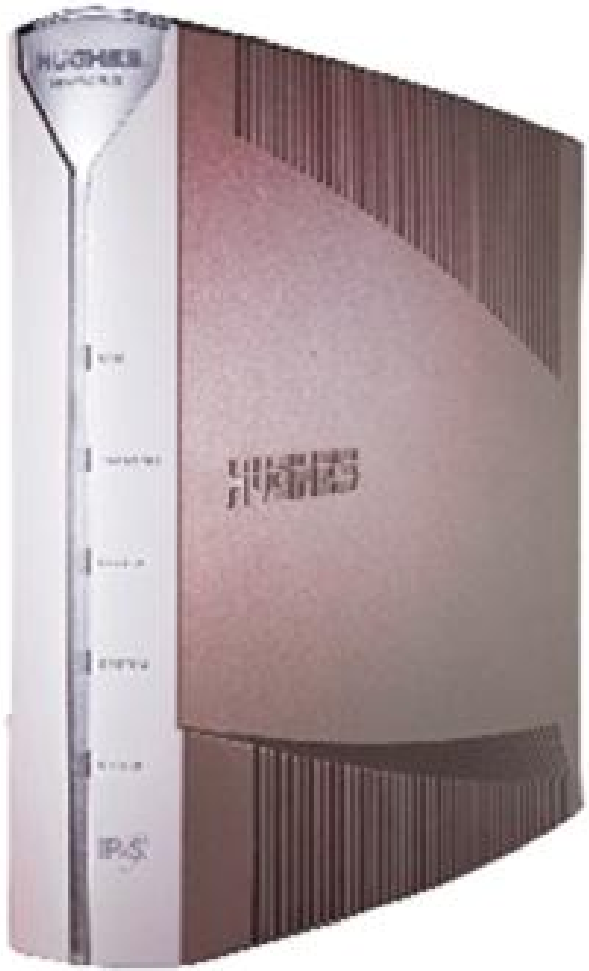
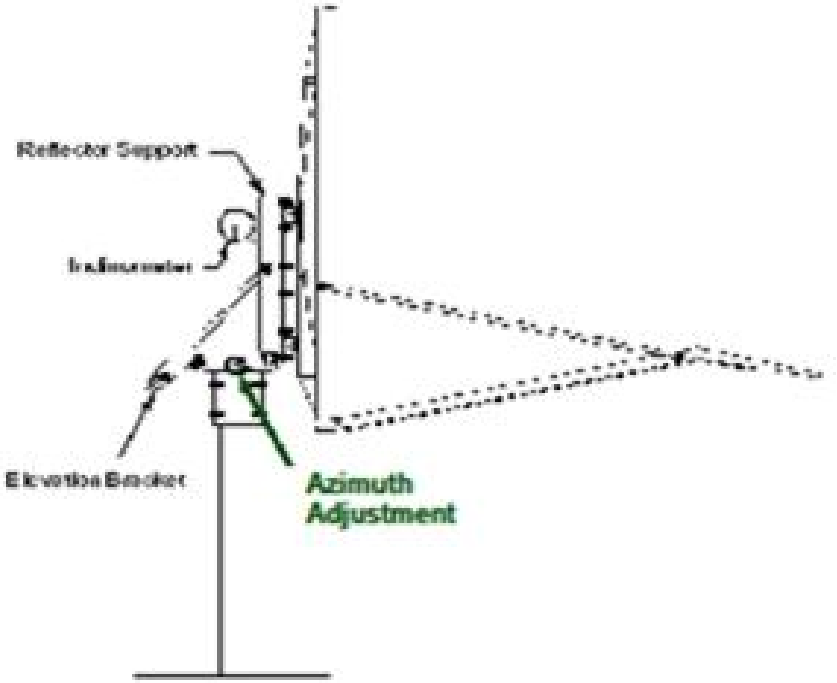
- The remote equipment consists of the following items
  - Antenna
    - Parabolic and rectangular antennas
    - Multiple sizes available
      - 74 cm, 98 cm, 1.2 meter, 1.8 meter, etc.
  - Outdoor Unit (ODU)
    - Also known as RF Unit or Radio
  - Interfacility Link (IFL) cables
    - TX IFL cable
    - RX IFL cable
  - Indoor Unit (IDU)
    - Two-way, high performance satellite router

HN9460



- Low cost, two-way indoor unit that supports high speed TCP/IP applications
  - Its software is updatable from the NOC
  - HN9460 will support IPv6
- User Interfaces
  - Two 10/100BaseT Ethernet LAN RJ45 ports
- Mechanical & Environmental Specifications
  - Weight (IDU): 1.6 lbs (2.18 kg)
  - Dimension (IDU): 8.05" W x 1.55" H x 8.95" D
  - Input Power: 90-264 Vac; 50-60 Hz
- Satellite Specification
  - Receiving
    - DVB-S2
    - 1- 45 Msps (up to 121 Mbps)
  - Transmitting
    - OQPSK, Turbo Code or LDPC
    - 256, 512, 1024, or 2048 ksps (up to 3.6 Mbps)
  - Radio
    - 1 or 2 watt Ka-band

Antenna



- The purpose of the antenna is to reflect the signal from the ODU to the satellite and to gather the signal from the satellite and reflect it into the ODU
- The remotes support different size antennas and different shapes
  - Rectangular and circular antennas
  - 74 cm (rectangular), 98 cm, 1.2 meter, 1.8 meter antennas, etc.

Standard Ka Pole Sizes

- 0.74m Antenna: 2.0" (2 3/8" OD)

- 0.98m Antenna: 2-1/2" (2-7/8" OD)
  - Requires Mast Adapter P/N 9200358-0004 (2-3/8" to 2-7/8")