



INSTALLING  
RELIABILITY



## 4.8 M UPLINK STATION

The ND SATCOM 4.8 m Uplink Station is designed for uplink operation with medium up to high uplink power in Ku-Band (13.75 – 14.5 GHz) or DBS-Band (17.30 – 18.40 GHz).

Potential applications for such an uplink are:

- TV Distribution, e.g. DTH (Direct-to-Home)
- TV Redistribution, e.g. receiving feeds from other fixed systems and retransmission in a customised bouquet
- TV Contribution, e.g. receiving SNG feeds

Typical applications for such an Uplink Station are contribution services from local subsidiaries of a TV station to the studio at headquarter, especially if the transmission needs a bandwidth in the range of 8 MHz and higher (e.g. EBU transmissions in MPEG 4:2:2 standards). The system can be offered on turnkey basis or as a supervised system only where installation is carried out by the customer but under the supervision of ND SATCOM.

As a system integrator for broadcasters and military forces operating worldwide, we design both indoor and outdoor HPAs whose modular construction is compact, reliable, easy to service and high performing. Our products are designed to adapt development to your operational needs, thus providing highly secure, custom-engineered solutions that have long established us as a trusted and reliable partner in satellite communications.

### KEY FEATURES

- 4.8 m Ku-/DBS-Band
- 1+1 or 2+1 Redundancy of full transmit chain(s)
- High uplink power by using 400 W or 750 W Outdoor HPA
- High quality equipment integrated providing high reliability
- Easy to operate due to a clearly arranged system design
- Reliable support and after sales service performed by an experienced ND SATCOM service team

### OPTIONS

- Equipment Shelter
- Standard ND SATCOM M&C System
- Uplink power control system for constant signal quality
- Antenna Redundancy

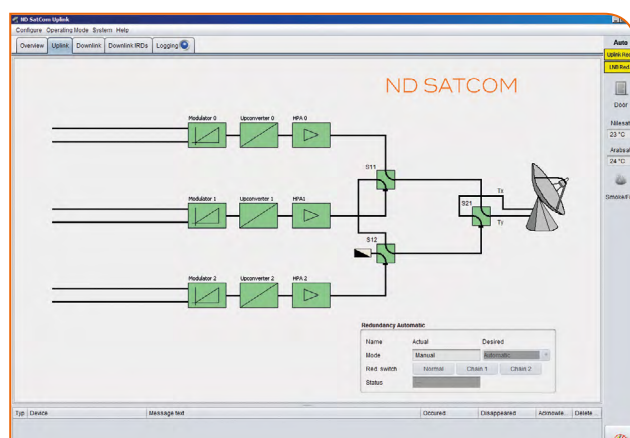
## TECHNICAL SPECIFICATIONS

### ANTENNA

Frequency Range	Ku-Band	DBS-Band
Antenna Type	Cassegrain	Cassegrain
Polarisation	4-port linear	4-port linear
Transmit Frequency	13.75 – 14.5 GHz	17.30 – 18.40 GHz
Receive Frequency	10.70 – 12.75 GHz	10.70 – 12.75 GHz
Transmit Gain	55.20 dBi@midband	56.90 dBi@midband
Receive Gain	53.50 dBi@midband	53.10 dBi@midband
Antenna Noise temperature	58 K@20° elevation	50 K@20° elevation
G/T 20° elevation with 70 K LNA	32.4 dB/K	32.3 dB/K
Cross Polarisation Isolation	35 dB on axis	35 dB on axis
Antenna Side lobes	Compliant to ITU-R S.580, FCC	
Travel Range	Elevation: 0° to 90° continuous, Azimuth: 120° continuous	
Wind Loading	Operational: 72 km/h gusting to 97 km/h, Survival: 200 km/h in any position	
Operational Temperature	-15 °C to +50 °C	
Humidity	0 to 100 % with condensation	

### TRANSMIT SYSTEM

TWT Power Tube	400 W	750 W	750 W
Flange Power	>350 W, >55.4 dBm	>650 W, 58.1 dBm	>650 W, 58.1 dBm
Operational EIRP max. (linearised)	73.4 dBW (76.4 dBW)	76.0 dBW (79.0 dBW)	77.7 dBW (80.7 dBW)
Modulation	DVB-S/S2/S2X		
Modulator Input	ASI or IP		
Symbol Rate up to	72 MBaud		
Operational Temperature	Indoor Version: -10 °C to 50 °C, Outdoor Version: -40 °C to +50 °C		
Humidity	<95 % non-condensing at 40 °C		
Power Consumption (with de-icing)	3.5 kVA (8.1 kVA)	5.7 kVA (10.3 kVA)	5.7 kVA (10.3 kVA)



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