

3.7 M UPLINK STATION

The ND SATCOM 3.7 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, customengineered solutions that have long established us as a trusted and reliable partner in satellite communications.

KEY FEATURES

- 3.7 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

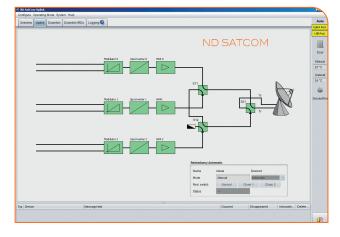
- Equipment Shelter
- Standard ND SATCOM M&C System
- Uplink power control system for constant signal quality
- Antenna Redundancy



TECHNICAL SPECIFICATIONS

| ANTENNA | | | |
|---------------------------------|--|--------------------|--|
| Frequency Range | Ku-Band | DBS-Band | |
| Antenna Type | Gregorian | Gregorian | |
| 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 | 52.80 dBi@midband | 54.70 dBi@midband | |
| Receive Gain | 51.10 dBi@midband | 51.10 dBi@midband | |
| Antenna Noise temperature | 65 K@30° elevation | 57 K@30° elevation | |
| G/T 30° elevation with 60 K LNA | 30.0 dB/K | 30.2 dB/K | |
| Cross Polarisation Isolation | 35 dB on axis | 35 dB on axis | |
| Antenna Side lobes | Compliant to ITU-R S.580-6 and ITU-R S.465-5 | | |
| Travel Range | Elevation: 0° to 90° continuous, Azimuth: 120° continuous | | |
| Wind Loading | Operational: 72 km/h gusting to 105 km/h, Survival: 200 km/h in any position | | |
| Operational Temperature | -40 °C to +52 °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) | 72.0 dBW (75.0 dBW) | 74.6 dBW (77.6 dBW) | 76.5 dBW (79.5 dBW) | |
| Modulation | | DVB-S/S2/S2X | | |
| Modulator Input | | ASI or IP | | |
| Symbol Rate up to | | 72 MBaud | | |
| Operational Temperature | Indoor Version: -10 | 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 (6.2 kVA) | 5.7 kVA (8.4 kVA) | 5.7 kVA (8.4 kVA) | |





HEADQUARTERS

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