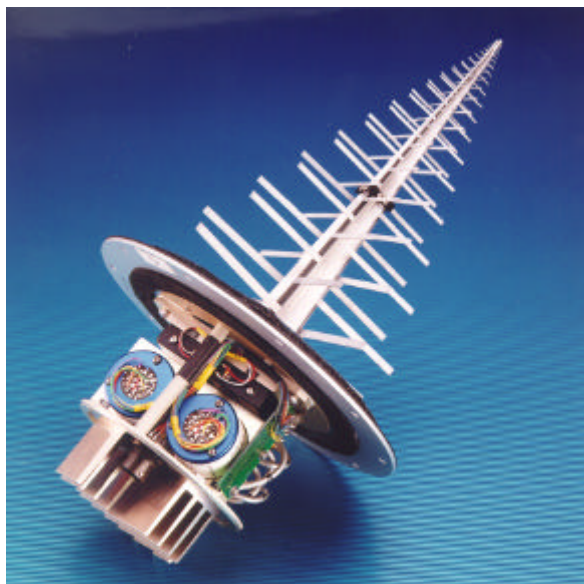


Active Antenna Feed HL024S5



Brief description

The feed consists of the Crossed Log.-Periodic Antenna HL024A1 with polarization switching network, four preamplifiers and an RF-switch for choosing the different frequency bands. An additional switchable bypass which bridges the preamplifiers is also integrated. The coverage of the frequency range 2 to 18 GHz by four amplifiers, each approximately one octave wide, provides the advantage that the noise figures thus obtained are better than for a broadband amplifier; moreover, intermodulation products of the second order are avoided.

The Active Antenna Feed is mainly used in reflector antennas e.g. AC090, AC120, AC180 and AC300.

- High sensitivity due to low noise preamplifiers
- Wide frequency range 2 to 18 GHz covered by four subbands
- Remotely switchable polarization
- Remotely switchable bypass
- BITE in

Specifications

Antenna

Frequency range	2 to 18 GHz (active) 1 to 18 GHz (passive)
Polarization	horizontal / vertical
Nominal impedance	50 Ω
VSWR	<2.5
Gain	7 dBi
Power supply	+12 V DC (1.3 A)
Connectors	2 x SMA female
Max. wind speed	180 km/h
(without ice deposit)	
Operating temperature	-30 to +55°C

Amplifiers

Frequency range (GHz)	2-4	4-8	8-12	12-18
Amplifier gain (dB)	26 ± 2	30 ± 2	33 ± 2	38 ± 2
Noise Figure (dB)	≤2.5	≤3.5	≤4.0	≤4.5
1 dB compression point (dBm)	≥+15	≥+15	≥+15	≥+15
VSWR in/out	≤2.0	≤2.0	≤2.0	≤2.0
DC supply	15 V/ 0.2 A	15 V/ 0.3 A	15 V/ 0.3 A	15 V/ 0.3 A

Recommended extras *

Control Unit (remote/computer controlled)	BG016
Control Unit (local control)	GB016A2
Microwave Cable	AC008W2

* not required if feed is used in Antenna Systems AC090 to AC300