MEOS™ ANTENNA

KONGSBERG

3.0 m to 5.0 m L/S/C/X/Ka-Band

MEOS™ Antenna comes with dish sizes up to 5.0 m. This gives sufficient margin for data reception from direct readout and remote sensing satellites. Designed for optimal maintainability and reliability, the MEOS™ Antenna utilizes the most modern industrial components available.

When integrated with a MEOS™ receiver and processing system, the total unit is a high performance data reception and processing terminal.

HiGH RELIABILITY

- Positioner internals and electronics operate in dehydrated environment
- Low mean time to repair, typically less than 2 hours
- Drive chain replacement possible with reflector and positioner installed
- Resumes operation automatically after a power break
- Self test and remote diagnostics
- Robust ACU and servo units with low failure probability

STANDARD FEATURES

- Web based moitor and control
- Remote monitoring and control over fiber optic cable
- ACU with Program and autotrack
- Automatic ephemeris download
- GPS time server in ACU
- External interfaces for integration by customer

RF SYSTEM

- L-Band
  - RF input: 1693-1710 MHz
  - IF out: 137.5 ± 10 MHz or 720 MHz
- X-Band
  - RF input 7,5-8.4 GHz
  - IF out: 720 MHz
- S-Band
  - RF Input: 2025-2120 MHz
- Ka-Band
  - RF input: 2550-27000 MHz
  - IF out: 720 MHz

Consult factory for other options

ANTENNA MEASURES AND REQUIREMENTS

- Temperature: Operational: -40° C to 60° C and Storage: -40° C to 60° C
- Relative humidity: 0-100 % including condensing
- Power requirements: 200 - 264 V AC, 50 – 60 Hz Nominal 230 V @ 16 A
- Weight: approx. 1000 kg

Optional items available upon request

FEATURES

- Designed for L-, S-, and X-band missions
- Single, dual band configuration available
- 3.0 m to 5.0 m dish size
- X/Y pedestal for elimination of overhead keyhole
- In-field diagnostics and alignment tools
- Remote and local monitoring and control available
- Easy installation and maintenance
- Autotrack*

* *Mechanical ±90 deg, Tracking from 1° elevation (except in keyhole position)*

TECHNICAL SPECIFICATIONS

MEOS™ ANTENNA PERFORMANCE DATA

Standard Reflector Sizes[1]				
	3.0 m	**3.8 m**	**4.3 m**	**5.0 m**
L Band G/T (1700)[*2]	10 dB/K	12 sB/K	13 dB/K	14 dB/K
S Band G/T (2400)[*2]	13 dB/K	15 dB/K	16 dB/K	17 dB/K
X Band G/T (8200)[*2]	dB/K	27 dB/K	28 dB/K	29 dB/K
Ka-Band	32 dB/K			
Pointing error	0.09° rms[3]			
Pointing resolution	0.005° on both axis			
Velocity	6 deg/s			
Wind speed operational	40 m/s	27 m/s	Radome recommended	
Wind speed survival	56 m/s	56 m/s	Radome recommended	
Travel	Mechanical ±90 deg, Tracking from 1° elevation (except in keyhole position)			

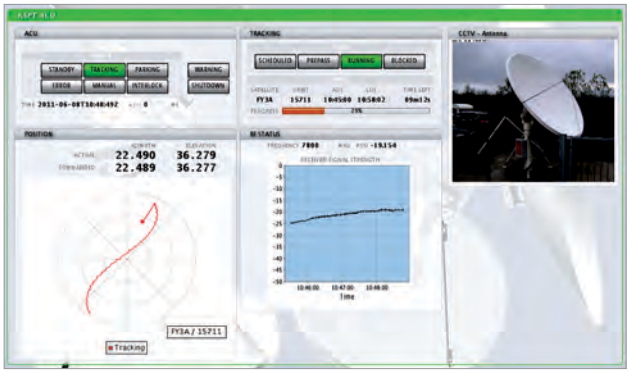
1. Ask for other sizes
2. Radome losses not included
3. Based on CFD (Computational fluid dynamics) and FEDEM (Finite Element Dynamics in Elastic Mechanisms) analysis for a 3.8 m dish with 27 m/s wind

OPTIONS

- Radome
- MEOS™ Control for remote monitor and controller.
  - Real time and historic status available
  - Monitor and Control fo external units e.g. demodulators, modulators, (see MEOS™ Control Product data sheet)
- Data Capture system MEOS™ Capture
- MEOS™ Connect

RELATED PRODUCTS

- MEOS™ Capture
- MEOS™ Connect
- MEOS™ Control



Operator interface and MEOS™ Antenna

Front page image: the Kongsberg Defence & Aerospace AS - Spacetec MEOS™ Antenna.
Specifications subject to change without any further notice.
MEOS™ is a registered trademark of Kongsberg Defence & Aerospace AS - Spacetec in Norway and other countries

KONGSBERG DEFENCE & AEROSPACE AS
SPACETEC
Telephone: +47 77 66 08 00
E-mail sales: marketing@spacetec.no
spacetec.no

KONGSBERG