



For decades Viasat has been a leading supplier of high quality tracking antennas to the telemetry users of the world. Using our experience we have refined our products into simple, robust, and technically superior telemetry systems.

The patented ESCAN tracking feed provides low sidelobes, high scanning rates, and superior multi-path resistance. In addition, we also have a high performance C-band tracking feed which can work alone or in conjunction with the L/S-band feed.

The series 13000 pedestal features patented bearing technology that combines long trouble free life with ease of service and maintenance. These pedestals are in service around the world, some in extreme harsh environments providing daily service.

The heart of the control system is Viasat's 3880 Antenna Control Unit (ACU). The 3880 is Viasat's fourth generation ACU and provides unequalled performance for tracking systems. Its ability for control, testing, and mission monitor (track files) is far better than any previous control unit.

Telemetry systems are available in fixed and mobile configurations as well as many size offerings in addition to those listed here.

## RANGE TELEMETRY SYSTEMS AT-A-GLANCE

- » A leading source for more than 50 years
- » Highly multi-path resistant ESCAN feed
- » High dynamics, high accuracy tracking pedestal
- » Fourth generation touch screen antenna control unit
- » Mobile and fixed configurations
- » Remote control

### Options

- » Separate data and tracking channels for improved performance
- » Dual drive pedestal
- » Slip-rings and rotary joint for continuous azimuth rotation
- » Transmit versions available in all frequency bands
- » Video camera
- » High dynamic C-band feed available simultaneous with L/S-band feed
- » Acquisition antenna
- » Dual or selectable polarizations
- » Larger reflector sizes as specifications may require

# L-, S- and C-band Range Telemetry Systems

## SPECIFICATIONS\*

### DYNAMICS

Velocity	30°/s (other velocities available; consult factory)
Acceleration	30°/s <sup>2</sup> (other accelerations available; consult factory)
Azimuth Travel	+/- 375°
Elevation Travel	-10° to +110°

### ENVIRONMENTAL

Temperature	-30° to +55° C
Rain	Up to 5/hr
Ice	0.5 in. radial
Wind	Operate in 45 mph, stow in 120 mph
Voltage/Frequency	120/208 VAC 50/60 Hz

\* Above specifications are with one LNA and no band pass filter.

## SERIES 3880 CONTROLS



## WHITE SANDS MISSILE RANGE



## STANDARD ANTENNA SIZES

	2.4m S-band	2.4m C-band	3.0m S- and C-band
Frequency <sup>1</sup>	1435 to 2300 MHz	4.7 to 5.1 GHz	1435 to 2300 MHz <sup>4</sup>
Feed Type	ESCAN	Single Channel Monopulse	ESCAN
Gain	31.0 dB @ 2300 MHz	35.9 dBi @ 4.7 GHz	33.0 dB @ 2300 MHz
HPBW @ 2300 MHz	3.8° nom @ 2300 MHz	1.9° nom @ 4.7 GHz	3.0° nom @ 2300 MHz
First Side Lobes	18 dB below peak or better	15 dB below peak or better	18 dB below peak or better
Polarization	LHC & RHC sim	LHC & RHC sim	LHC & RHC sim
Axial Ratio	2.0 dB maximum at beam peak	2.0 dB maximum at beam peak	2.0 dB maximum at beam peak
Guaranteed G/T <sup>2 &amp; 3</sup>	8.6 dB/K @ 2300 MHz	12.5 dB/K @ 4.7 GHz	10.5 dB/K @ 2300 MHz

### NOTES

<sup>1</sup> Wider Frequency coverage available please consult factory.

<sup>2</sup> G/T at 20° elevation, 23° C, 7.5 gr/m<sup>3</sup> and under clear sky conditions.

<sup>3</sup> Separate data and tracking channels and other feed configurations with enhanced G/T performance are available as options.

<sup>4</sup> S-band data shown, C-band data available on request.



## CONTACT

### SALES

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