

Image Intelligence in Real-Time



Troll's TrollScan Antenna System incorporates a 4ft cosecant squared reflector for high quality digital ENG receive sites. TrollScan provides the gain necessary to maximize range, ensure signal isolation and optimize frequency re-utilization.

A modern implementation of an "old-school" design, TrollScan's are simple, rugged and built to provide the highest performance in demanding physical and RF environments.

TrollScan antennas can support dual-rotary joints, which allow for simultaneous dual-band or dual-polarized operation. The dual-polarized option is the only way to realize the high-bit-rates offered by MIMO (Multiple Input Multiple Output) communications systems. TrollScan's orthogonally polarized beams can either double the data rate or provide two-channel diversity that increases the link's robustness.

- Direct drive positioning motor
- Weatherproof rotary joint design
- Operation from UHF to Ku Band
- Continuous rotation

Installation Compatibility

TrollScan control cable and mounting configuration is backwardly compatible with ProScan II.

Existing Systems

TrollScan offers a service and replacement path for existing ProScan II installations

Typical applications include

- Electronic News Gathering
- Defense Infrastructure
- Military Surveillance
- Airborne Law Enforcement

Air-to-Ground Ethernet Connectivity

TrollScan Ultra-High-Gain ENG Tracking Antenna



Dual-band or dual-polarization

Heavy-duty construction

Highly accurate positioning system

Powerful direct drive motor

High dynamic range LNA/BDC

4ft cosecant squared reflector

Backward compatibility with ProScan II control cable assembly

Ultra-High-Gain Tracking Antenna TrollScan Tracking Antenna

TrollScan

SPECIFICATIONS

Specifications subject to change without notice.

System Properties

Connection: Single Control Cable
 Power: 28 vdc (3 Amps) or 110 / 240 VAC
 Outputs: 2 ASI, 75 ohm
 Control Device: DMR and S-Type Site Controller (S750, X750)
 Receiver/Demodulator: 2 Channel DMR Series Receiver
 Antenna Type: 4' Cosecant Parabolic
 Frequency: 1.4 GHz to 15GHz
 Gain: 24 dBi to 46 dBi (Dependant on Frequency)
 Antenna Polarization: Vertical (Cosecant Parabolic)
 Steering Azimuth: Continuous Rotation, Max Speed 60°per second

Transport stream: ASI / Ethernet
 Control: Serial Control via Troll Control System
 COFDM number of Carriers: 2K
 Modulation Types: QPSK, 16-QAM & 64-QAM
 Forward Error Correction: 1/2, 2/3, 3/4, 5/6, 7/8
 Guard Intervals: 1/32, 1/16, 1/8, 1/4
 Input Frequency: 49 - 862 MHz
 Input Impedance: 75 ohm
 Bandwidth Selections: 6, 7 or 8 MHz

Block Down Converter:
 RF Frequency Range: 1.4 GHz to 15GHz
 RF Input VSWR: <1.5:1
 IF Frequency Range: 810 – 300 MHz
 RF Input Impedance: 75 ohms
 Noise Figure: <3.0 dB



Environmental
 Temperature: 0° to +55°C
 Mechanical
 Dimensions: 7' H x 4.25' W x 6.5' D
 Weight: 300 lbs
 Base: 24"W x 24"L

Antenna Characteristics Type 4' Cosecant Parabolic	L Band	S Band	Lower C	Upper C	Ku Band
Mid-Band:	1.8 GHz	2.3 GHz	4.4 GHz	6.5 GHz	14 GHz
Antenna Gain:	24 dBi	26 dBi	34 dBi	36 dBi	46 dBi



The Data Link Experts

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