

## **GPS/TETRA Band Survivor™ Antenna**

GPSS380DP26-001

Innovative **Technology** for a **Connected** World



# HEAVY DUTY COMMERCIAL ANTENNA MEETS THE COMMUNICATION CHALLENGES OF TRANSPORTATION PROVIDERS WORLDWIDE

The GPSS380DP26-001 TETRA band Survivor™ antenna is a heavy duty commercial vehicular antenna that offers high performance and sensitivity for the accurate location and timing of signals that continuously update the position of a travelling vehicle. It operates in the 380 to 430 MHz frequency band with 2.8 dBi (radio) gain, and a 26 dB right-hand circularly polarized active GPS patch that requires a bias voltage of +3.3 to +5V DC.

The antenna has a rugged molded housing and a 5/8" diameter mounting stud allows for quick and easy installation on a vehicle. The antenna comes standard with RG58 cable w/ TNC connector (radio) and RG174 w/ SMA Reverse Polarity (GPS), but other connectors may be available upon request.

### **FEATURES**

- Frequency range: 380 to 430 MHz
- Avg. VSWR: <2:1
- Gain: 2.8 dBi (radio), 26 dB (GPS)
- Power: 50W (max, PTT = 15 minutes)
- Mounting information: 5/8" (16 mm) hole
- Termination: UHF RG58A/U w/ FME plug (male), GPS - RG174 w/ FME socket (female)

#### **BENEFITS**

- Highly durable molded housing design survives the harshest of environments and applications
- 26 dB active GPS patch antenna which reacquires lost signal faster
- 5/8" diameter durable mounting stud attaches quickly and easily to roof, trunk, cab, or hood

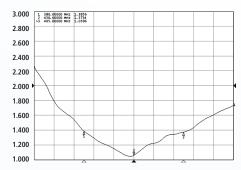
### **MARKETS OR APPLICATIONS**

- General voice/data communications
- TETRA public safety
- Transportation agencies, utilities, government, and military

## **SPECIFICATIONS**

ELECTRICAL			
Peak Gain	2.8 dBi / 26 dB		
MECHANICAL			
Antenna Height	7.17" (182 mm)		
Weight (Mass)	1 lbs (450 g)		
Diameter	3" (76.2 mm)		
Temperature	-55°C to +85°C		

## **VSWR DIAGRAM**



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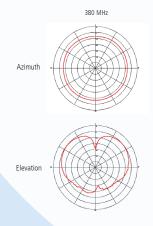
## **UHF ANTENNA (TX/RX)**

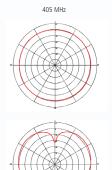
PARAMETER		
Frequency Range	380-430 MHz	
Pattern	Omnidirectional	
Polarization	Vertical	
Elevation Beamwidth at Half-Power	120°	
Azimuth Beamwidth at Half-Power	360°	
Maximum Power	50 Watts	
	PTT for 15 min	
Nominal Impedance	50 Ω	
VSWR	< 2:1	
Termination	FME Plug (male)	
Mounting Information	Drill 5/8" (16 mm) Hole & Install	
Radome Material	ABS	
Ground Plane (min)	1.25 ft2 (381 mm <sup>2</sup> )	
Cilli	Type: RG58A/U	
Cable	Length: 1 ft, exit at bottom	

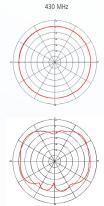
## **GPS ACTIVE ANTENNA (RX ONLY)**

PARAMETER		
Frequency Range	1575.42 MHz ± 1 MHz	
Polarization	Right Hand Circularly Polarized (RHCP)	
Antenna Gain	3 dBi min (elevation = 90°)	
	-5 dBi min (elevation =20°)	
Azial Ratio	4.0 dB max (elevation = 90°)	
	6.0 dB max (elevation = 10°)	
Output Impedance	50 Ω	
VSWR	< 1.5:1	
Termination	FME Socket (female)	
Normal Gain	(26 ± 3) dB	
Noise Figure	1.5 dB @25°C	
Power Supply	3 to 5 Vdc	
Current Consumption	20mA max	
Power Handling	1W max	
ESD Rating	± 8 KV	
Cable	Type: RG174	
	Length: 1ft, exit at bottom	
GPS Attenuation Responses	600 MHz ~ 1000 MHz	-40 dBc
	1475 MHz	-30 dBc
	1525 MHz	-20 dBc
	1625 MHz	-15 dBc
	1675 MHz	-25 dBc

## **PATTERNS**







### ANT-DS-GPSS380DP26-001 1110