

90 Degree, 14 dBi Sector Antenna, Dual-Polarized, 4.4 to 5GHz

**SEC-4.7D-90-14**



The RadioWaves SEC-4.7D-90-14 high performance sector antenna is specifically designed for Military and Public Safety and has 13 to 15 dBi of gain. Measuring 12" x 5", the SEC-4.7D-90-14 antenna is extremely compact and fortified to stand up to all environments.

The SEC-4.7D-90-14 has 90° Horizontal Beamwidth and 15° Vertical Beamwidth patterns with Vertical + Horizontal polarization and features 2 x Type N Female connectors. The 2-port SEC-4.7D-90-14 is rugged and weatherproof and features a heavy-duty UV-resistant plastic radome for all-weather operation.

The SEC-4.7D-90-14 operates from 4400 to 5000 MHz which is ideal for Point-to-Multipoint coverage in Military and Public Safety applications. The 2 x Type N Female connectorized SEC-4.7D-90-14 includes mounting bracket and hardware for ease of installation.

**Features**

- Dual polarity feed system in single enclosure
- Includes tilt and swivel mast mounting
- Two integral N-Female connectors
- UV-resistant radome for all-weather operation
- MIMO - Multiple-Input and Multiple-Output

**Applications**

- 4.4 GHz Military bands
- 4.9 GHz Public Safety bands
- 5G applications
- Wireless Internet Services

**SPECIFICATIONS**

**General**

Antenna Type	Sector Antenna
Size, nominal	1 ft   0.3 m

Polarization	Dual
Standard RF Connector Type	N-Female

### Electrical

Operating Frequency Band	4.4 - 5 GHz
Half Power Beamwidth, Horizontal	90 degrees
Half Power Beamwidth, Vertical	15 degrees
Cross-Polarization Discrimination	25 dB
Front to Back Ratio (F/B)	20 dB
Gain, Low Frequency	13 dBi

Gain, Mid Frequency	14 dBi
Gain, High Frequency	15 dBi
VSWR	2.0:1
Return Loss	-10 dB
Port to Port Isolation, Max (dB)	25 dB

### Mechanical

Fine Elevation Adjustment	+/- 5 degrees
Mounting Pipe Diameter, Min	2 inch   5.1 cm
Mounting Pipe Diameter, Max	4.5 inch   11.4 cm
Net Weight	5 lbs   2.3 kg
Wind Velocity Operational	90 mph   145 km/h

Wind Velocity Survival Rating	125 mph   201 km/h
Mechanical Configuration	SEC-4-7D
Axial Force (FA)	85 lbs   378 N
Side Force (FS)	32 lbs   142 N
Operating Temperature Range	-40 to +60 C

### Regulatory Compliance

Industry Canada Compliance	undeclared
RoHS-compliant	Yes

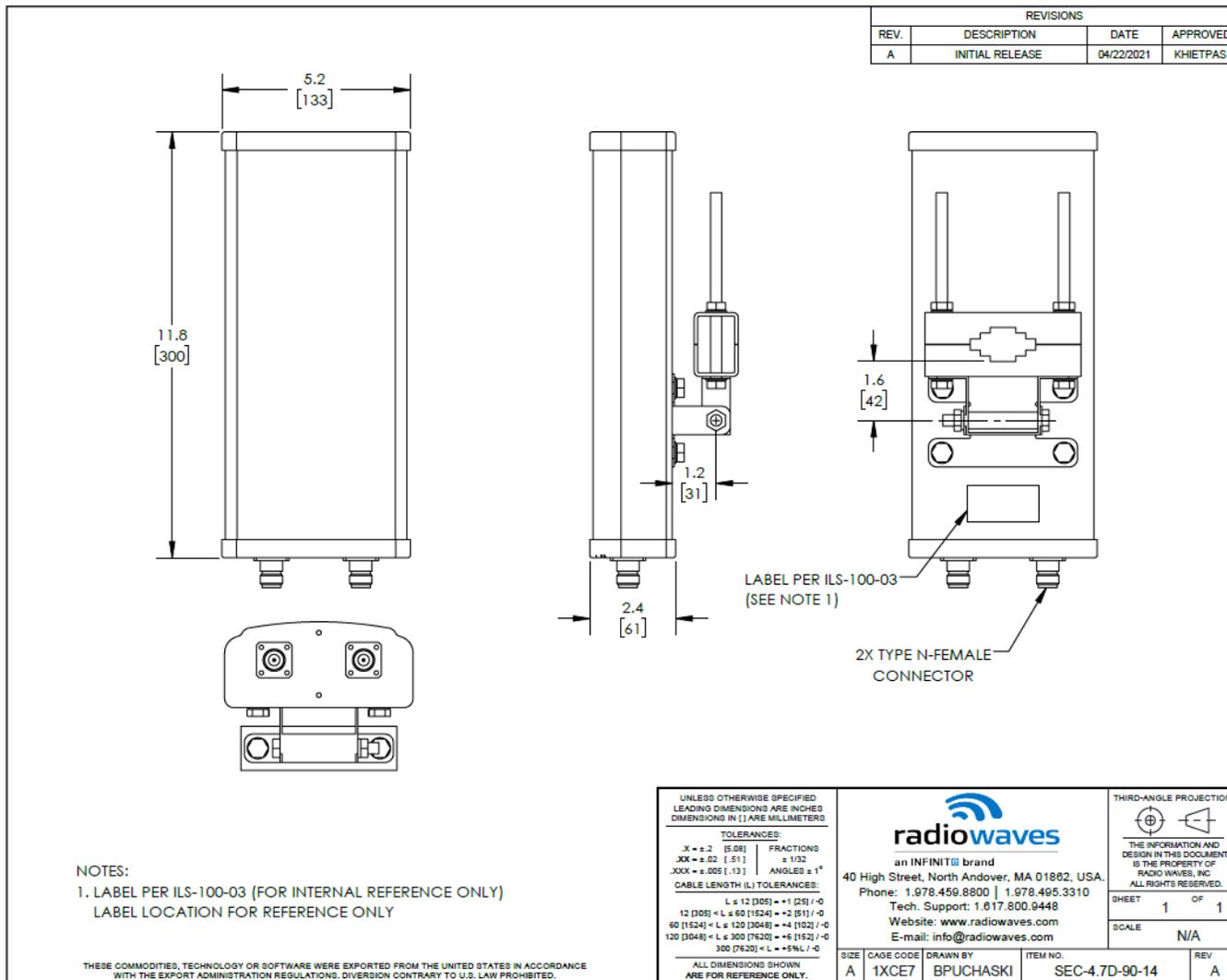
### Shipping Information

Package Type	Cardboard
Gross Weight	4 lbs   1.6 kg

Dimensions, L x W x H	6 x 14 x 9in   30 x 68 x 20 cm
Shipping Volume	1.5 cu ft   0.04 cu m

Contact RadioWaves for alternate RF interface options.

TECHNICAL DRAWINGS



REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/22/2021	KHIETPAS

11.8 [300]

5.2 [133]

1.2 [31]

2.4 [61]

1.6 [42]

LABEL PER ILS-100-03 (SEE NOTE 1)

2X TYPE N-FEMALE CONNECTOR

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2	[5.08]	FRACTIONS
.XX = ±.02	[.51]	± 1/32
.XXX = ±.005	[.13]	ANGLED ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	±.1 [25] / -0
12 [305] < L ≤ 60 [1524]	±.2 [51] / -0
60 [1524] < L ≤ 120 [3048]	±.4 [102] / -0
120 [3048] < L ≤ 300 [7620]	±.6 [152] / -0
300 [7620] < L	±.5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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SIZE	CASE CODE	DRAWN BY	ITEM NO.	REV
A	1XCE7	BPUCHASKI	SEC-4.7D-90-14	A

NOTES:

- LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)  
LABEL LOCATION FOR REFERENCE ONLY

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