



MODELS: 1942- RT 1942- TA 1942- GM

2.0 to 30.0 MHZ HF BROADBAND ANTENNAS



This 1942 NVIS compact, antenna is available in three separate models.

The 1942-RT (Roof Top) is designed for a semi-permanent roof top installation. Its small footprint (less than 50 ft. square) allows straightforward mounting on flat roof commercial buildings. Since it is designed to be mounted on existing roofs it does not require roof penetrations for installation.

The 1942-TA (Transportable Antenna) comes with ground anchors, and nylon bags which are easily carried to any cleared area for assembly. The TA antenna may be set up using non penetrating mounts when the ground condition does not allow for penetration. (Part Number: NPAM1942)

The 1942-GM (Ground Mount) antenna is essentially identical to the transportable version except it is meant for a semi-permanent to permanent installation. The anchors are more substantial and there is no carry bag.

All versions have stainless steel elements and ground radials. All have snap together aluminum mast sections that can be assembled on the ground and easily pivoted up to the erect position. The RT and GM systems utilize guy wires manufactured by *Phillystran, Inc.* using coated Kevlar® for maximum strength.

These broadband terminated center-fed antennas require no tuning across the entire bandwidth, eliminating the need for antenna adjustment or an antenna tuner. The 1942 antenna achieves a VSWR 1.8:1 or less over its entire range. A near vertical radiation pattern at frequencies below 10 MHz is ideal for reliable communications at 500 miles (800 Km). Lower radiation angles above 10MHz allow for reliable communications over much greater distances.

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<i>Electrical Characteristics</i>	1942-RT	1942-TA	1942-GM
Frequency range	2.0 — 30.0 MHz	2.0 — 30.0 MHz	2.0 — 30.0 MHz
Power Rating	1 kW Ave / 2 kW PEP	1 kW Ave / 2 kW PEP	1 kW Ave / 2 kW PEP
Polarization	Horizontal and Vertical	Horizontal and Vertical	Horizontal and Vertical
Elevation Radiation Pattern	Near Vertical Incidence Skywave	Near Vertical Incidence Skywave	Near Vertical Incidence Skywave
Nominal VSWR	2.5:1	1.6:1 Nominal 1.8:1 Max	1.6:1 Nominal 1.8:1 Max
Input impedance	50 Ohms	50 Ohms	50 Ohms
Input connector	Type "N"	Type "N"	Type "N"
Coaxial Cable	Not Included	75 Ft (23m) LMR 240	Not Included

** Low Power Models are
1942-RT-LP,
1942-TA-LP and 1942-GM-LP
respectively

<i>Mechanical Characteristics</i>	1942-RT	1942-TA	1942-GM
Mast Height	20 ft. / 6.13 m	20 ft. / 6.13 m	20 ft. / 6.13 m
Construction	Aluminum Mast	Aluminum Mast	Aluminum Mast
	Stainless Steel Elements And Ground Radials	Stainless Steel Elements And Ground Radials	Stainless Steel Elements And Ground Radials
Guy Wires	Solid Polyurethane coated Kevlar® coated guy wires (4)	Polypropylene hollow braid rope (4 guys w/ tensioners)	Braided Polyurethane coated Kevlar® coated guy wires (4)
Maximum Wind Speed (no ice)	110 MPH (177 km/h)	59 MPH (95km/h)	110 MPH (177 km/h)
Deployment Area	50 ft. square (15.25 m)	50 ft. square (15.25 m)	50 ft. square (15.25 m)
Net weight**	150 Lbs. (60 Kg)	44 Lbs. (32 Kg)	70 Lbs. (32 Kg)
Shipping weight	194 Lbs. (88 Kg) (4 pkgs.)	50 Lbs. (23 Kg) (2 boxes)	86 Lbs. (39 Kg) (2 boxes)
Erection Time	Varies by building, complete installation in about one day.	2 people Less than 30 minutes	2 people Less than 120 minutes

**Roof Top Weight excludes ballast, but
includes optional sled kit
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OPTIONS:

1942-SK: This kit contains 5 modified non penetrating roof sleds with rubber mats. This allows quick, and easy installation of the 1942 RT system.

NPAM1942: This kit allows for installation on ground surfaces where penetration is not permissible. (Net weight: 32 Lbs. / 15 Kg)

VSWR depends upon the height of the antenna above ground, ground conditions, and the influence of other structures or antennas in the vicinity. The specification is for ideal conditions.

