

Non Cellular Omnidirectional Base Station Antennas

Fibreglass Omnidirectional Antennas

CATC (Green Tube) Series



CATC VHF / UHF Series Fibreglass Omnidirectional Antennas

The CATC is a medium gain collinear antenna suitable for masthead mounting or stand-off mounting from a tower or a mast. A high degree of decoupling from the support structure and the feeder cable is achieved without the use of ground plane rods. The radiating elements are encapsulated in low-loss polyurethane foam which bonds them firmly to the inside of the radiator housing thus ensuring good mechanical stability. The antenna is fitted with a short length of URM67 coaxial cable terminated in a type N series plug.

Features

- Excellent performance and durability
- Slim tapered design
- Integral mounting clamp
- Rugged glass fibre protection
- Digital PMR and PMR applications



Technical Data

Maximum Power:	75 watts/100 watts*
Polarization:	Vertical
Nominal Impedance:	50 ohms
VSWR:	< 1.5:1 typical
Radome Material:	Green tapered glass fibre tube, 32mm / 41mm* OD
Radiator Material:	Copper
Lightning Protection:	DC ground
Termination:	Type N male
Feeder Tail:	915mm (3ft) URM67 coaxial cable
Mounting:	Integral clamp mounts to a 32-51mm (1.25-2.01") pipe
Integral clamp:	Aluminium casting, stainless steel U-bolts and fasteners

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Antenna Electrical Specifications

Model	Frequency Range	Centre Frequency	Gain	Bandwidth	E-Plane Beamwidth (-3 dB)	Maximum Power
CATC140	138-147MHz	142.5MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC150	142-152MHz	147.0MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC155	147-157MHz	152.0MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC160	152-163MHz	157.5MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC165	158-168MHz	163.0MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC170	163-174MHz	168.5MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC180	177-188MHz	182.5MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC230	221-235MHz	228.0MHz	3dBd (5.2dBi)	6% typical	36° typical	100 watts
CATC390/G3	380-396MHz	388.0MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC395/G3	387-404MHz	395.5MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC410/G3	403-421MHz	412.0MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC420/G3	412-430MHz	421.0MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC430/G3	421-439MHz	430.0MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC440/G3	430-450MHz	440.0MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC450/G3	441-460MHz	450.5MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC460/G3	450-470MHz	460.0MHz	3dBd (5.2dBi)	4% typical	32° typical	75 watts
CATC390	380-396MHz	388.0MHz	5dBd (7.2dBi)	4% typical	16° typical	75 watts
CATC410	403-421MHz	412.0MHz	5dBd (7.2dBi)	4% typical	16° typical	75 watts
CATC420	412-430MHz	421.0MHz	5dBd (7.2dBi)	4% typical	16° typical	75 watts
CATC440	430-450MHz	440.0MHz	5dBd (7.2dBi)	4% typical	16° typical	75 watts
CATC450	441-460MHz	450.5MHz	5dBd (7.2dBi)	4% typical	16° typical	75 watts
CATC460	450-470MHz	460.0MHz	5dBd (7.2dBi)	4% typical	16° typical	75 watts

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Mechanical Specifications

Model	Overall Length	Weight (Mass)	Rated Wind Velocity	Horizontal Thrust at Rated Wind
CATC140	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC150	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC155	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC160	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC165	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC170	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC180	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC230	2630mm (8.63ft)*	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC390/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC395/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC410/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC420/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC430/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC440/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC450/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC460/G3	1460mm (4.79ft)	0.85kg (1.87lbs)	119.93mph (193km/h)	6.1kg (13.49lbs)
CATC390	2630mm (8.63ft)	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC410	2630mm (8.63ft)	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC420	2630mm (8.63ft)	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC440	2630mm (8.63ft)	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC450	2630mm (8.63ft)	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)
CATC460	2630mm (8.63ft)	1.2kg (2.65lbs)	119.93mph (193km/h)	8.2kg (18.1lbs)

*41mm OD, all others 33mm