Logarithmic Periodic Vertical Polarization Half-power Beam Width

690 – 2690

V

67°

KATHREIN

Preliminary Issue

VPol LogPer 690–2690 67° 11dBi

Type No.	742192V02				
Frequency range	690 – 960 MHz	960 – 1695 MHz	1695 – 2200 MHz	2200 – 2490 MHz	2490 – 2690 MHz
VSWR	< 1.5	< 1.5	< 1.5	< 1.5	< 1.6
Gain	10.3 dBi	11.0 dBi	11.0 dBi	11.0 dBi	11.0 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical
Front-to-back ratio	> 25 dB	> 25 dB	> 25 dB	> 22 dB	> 25 dB
Half-power beam width horizontal vertical	 67° 54°	 57° 50°	 53° 48°	 47° 45°	 41° 44°
Intermodulation IM3 (2 x 43 dBm carrier)	< –150 dBc	< –150 dBc	< –150 dBc	< –150 dBc	< –150 dBc
Max. power	300 W	250 W	200 W	170 W	150 W
Total power	500 W (at 50 °C ambient temperature)				
Input	1 x 7-16 female				
Connector position	Bottom				
Weight	5.5 kg				
Wind load (at 150 km/h)	Frontal / lateral / rearside: 20 / 210 / 30 N				
Height/width/depth	300 / 155 / 785 mm				

Material: Radiator: Tin-plated copper.
Reflector screen: Weather-proof aluminum.
Radome: Fiberglass, color: Grey.
All screws and nuts: Stainless steel

Mounting: The antenna can be mounted on tubular mast with a diameter of 30 – 70 mm with supplied clamps.

Grounding: All metal parts of the antenna as well as the inner conductor are DC grounded.

Ice protection: Due to the very sturdy antenna construction and the protection of the radiating system by the radome, the antenna remains operational even under icy conditions.

Pressure test: The antenna has passed a pressure test according to Official Journal of the European Communities L245/171 from 12.09.2002 for the use of the antenna in train tunnels for high speed railways.
During test the antenna was subject to alternating pressure with a number of $1x10^6$ alternations of load.
The antenna exceeds the standard as follows:
Pressure difference according to L245/171: 10 kPa
Pressure difference during test: 20 kPa