FIA 03-710DW-XR

E-band 1ft (30cm) dual pol antenna with embedded Ortho mode transducer



General Specifications

Diameter	0.3 m
Standard Colour	RAL 7035
Shroud	Low Profile - Deep dish type
Antenna Input	Integrated, according to Customer's specifications
Polarization	Dual

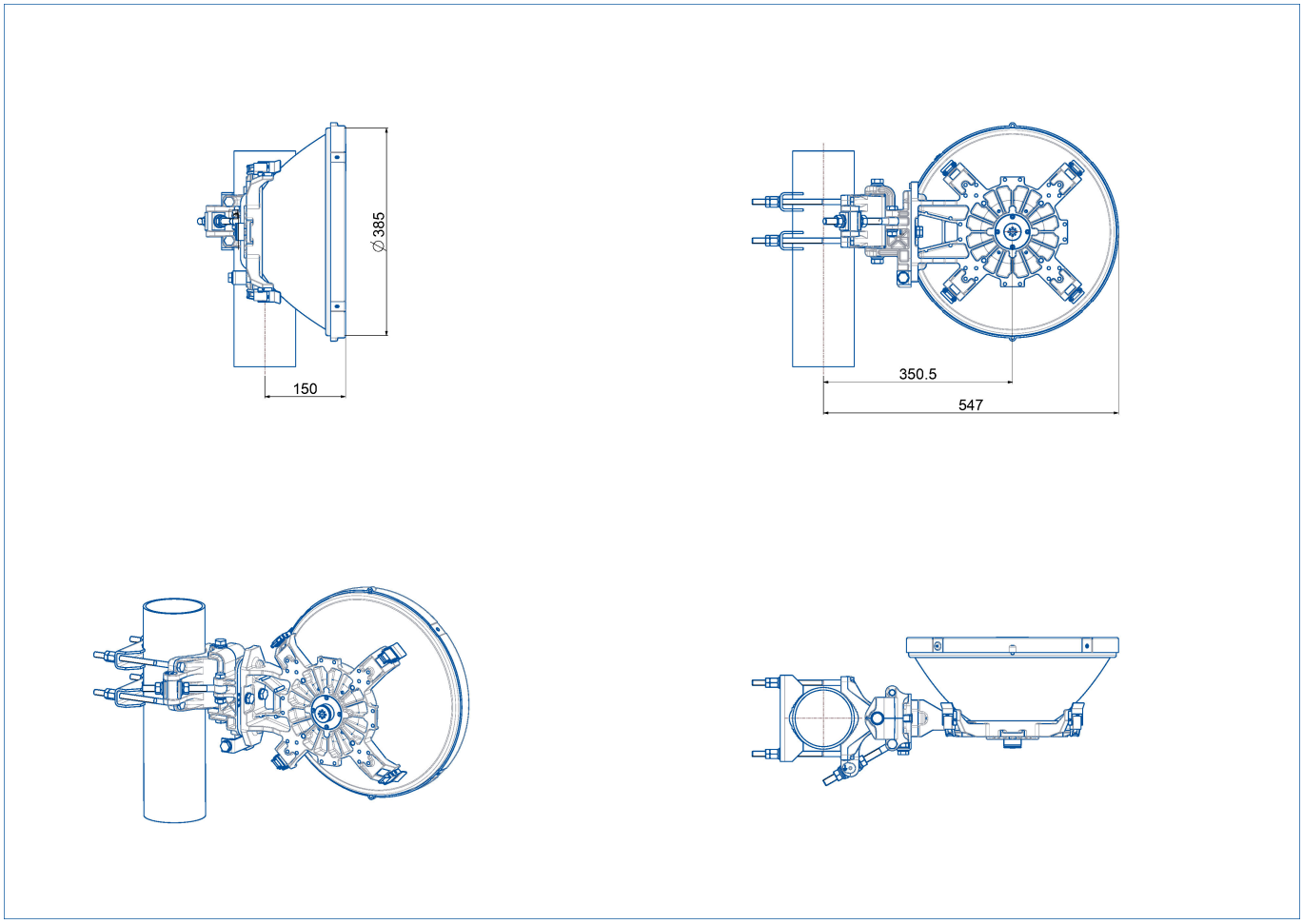
Mechanical Characteristics

Pole	50 - 115 mm
Elevation-fine adjustment	+/- 15 deg
Azimuth-fine adjustment	+/- 20 deg
Side struts, included	0
Side struts, optional	0
Net weight	7.3 Kg
Radome	Rigid Plastic
Wind velocity Operational	45 m/s
Wind velocity Survival	70 m/s
Wind deflection	< 0.3 times the -3 dB beam width
(with a wind velocity of 45 m/s)	Specified wind deflection applies for 115 mm dia mounting pipe only

Antenna Dimensions

(pole mount included)

Height	385 mm
Width	547 mm
Depth	150 mm



Wind forces at wind velocity survival rating and with 25 mm (1") ice load

Axial force	472 N
Side force	234 N
Twisting Moment	167 N*m

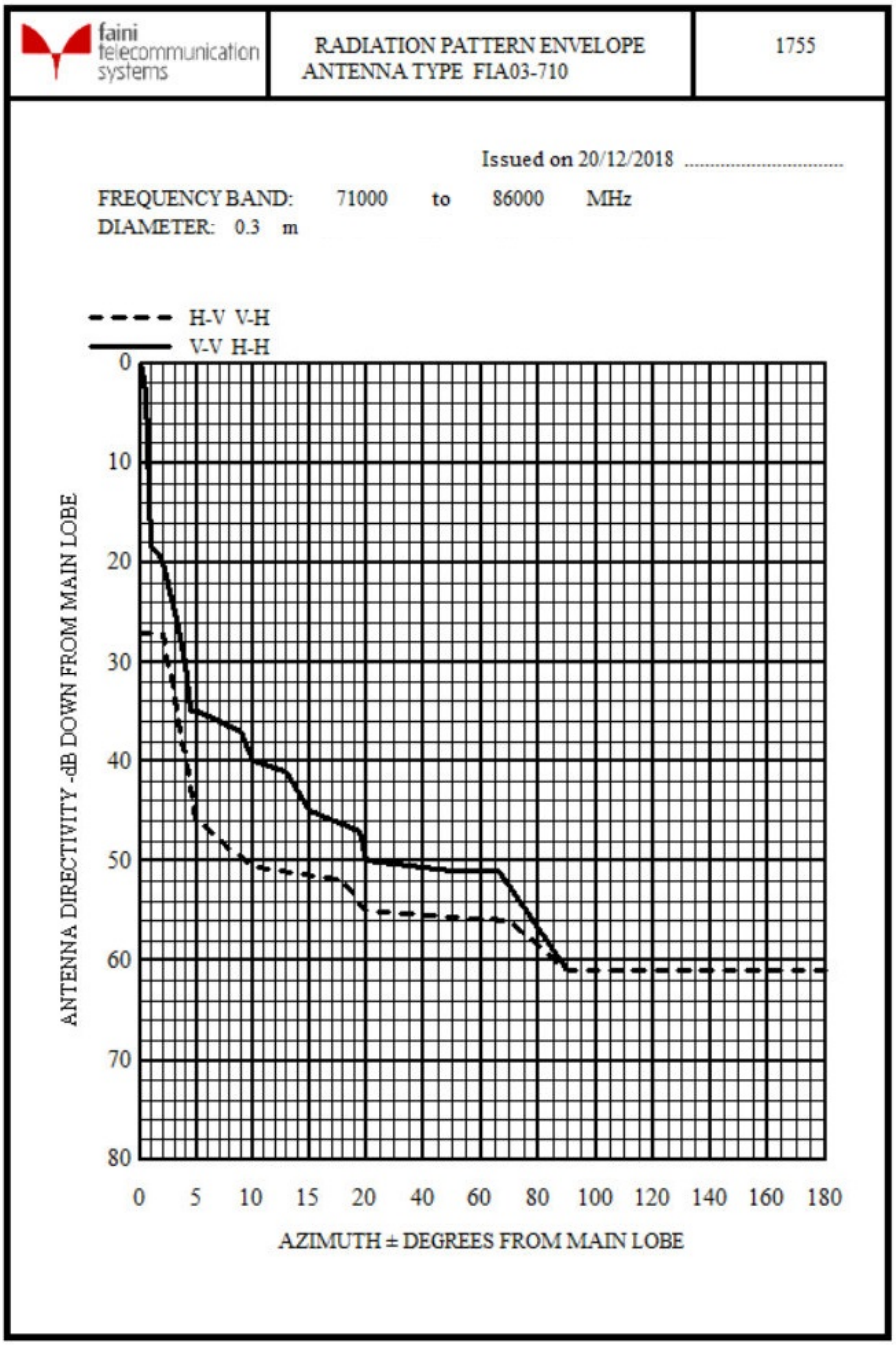
Maximum forces exerted on a supporting structure as a result of wind (survival rating) from the most critical direction for each parameter. These values may not occur simultaneously. All forces are referred to the mounting pipe of 115 mm diameter.

Electrical Characteristics

Frequency range	71-86 GHz
Gain, low band	44.5 dBi
Gain, mid band	45.0 dBi
Gain, top band	45.5 dBi
Return Loss	14 dB
VSWR	1.5
HPBW	1 deg
Front to back ratio	63 dB
Isolation	30 dB
XPD	27 dB
Electrical Compliance	ETSI 302 217 Class 3
	US FCC Part 101.115

Shipping Information

Gross weight	9.3 Kg
Height	300 mm
Depth	600 mm
Width	400 mm


faini telecommunication systems
RADIATION PATTERN ENVELOPE
ANTENNA TYPE FIA03-710
1755
Issued on 20/12/2018
FREQUENCY BAND: 71000 to 86000 MHz
DIAMETER: 0.3 m
H-V V-H
V-V H-H
ANTENNA DIRECTIVITY -dB DOWN FROM MAIN LOBE
0
10
20
30
40
50
60
70
80
0 5 10 15 20 40 60 80 100 120 140 160 180
AZIMUTH ± DEGREES FROM MAIN LOBE