FIA 03-710DW

E-band 1ft (30cm) dual pol antenna with external 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

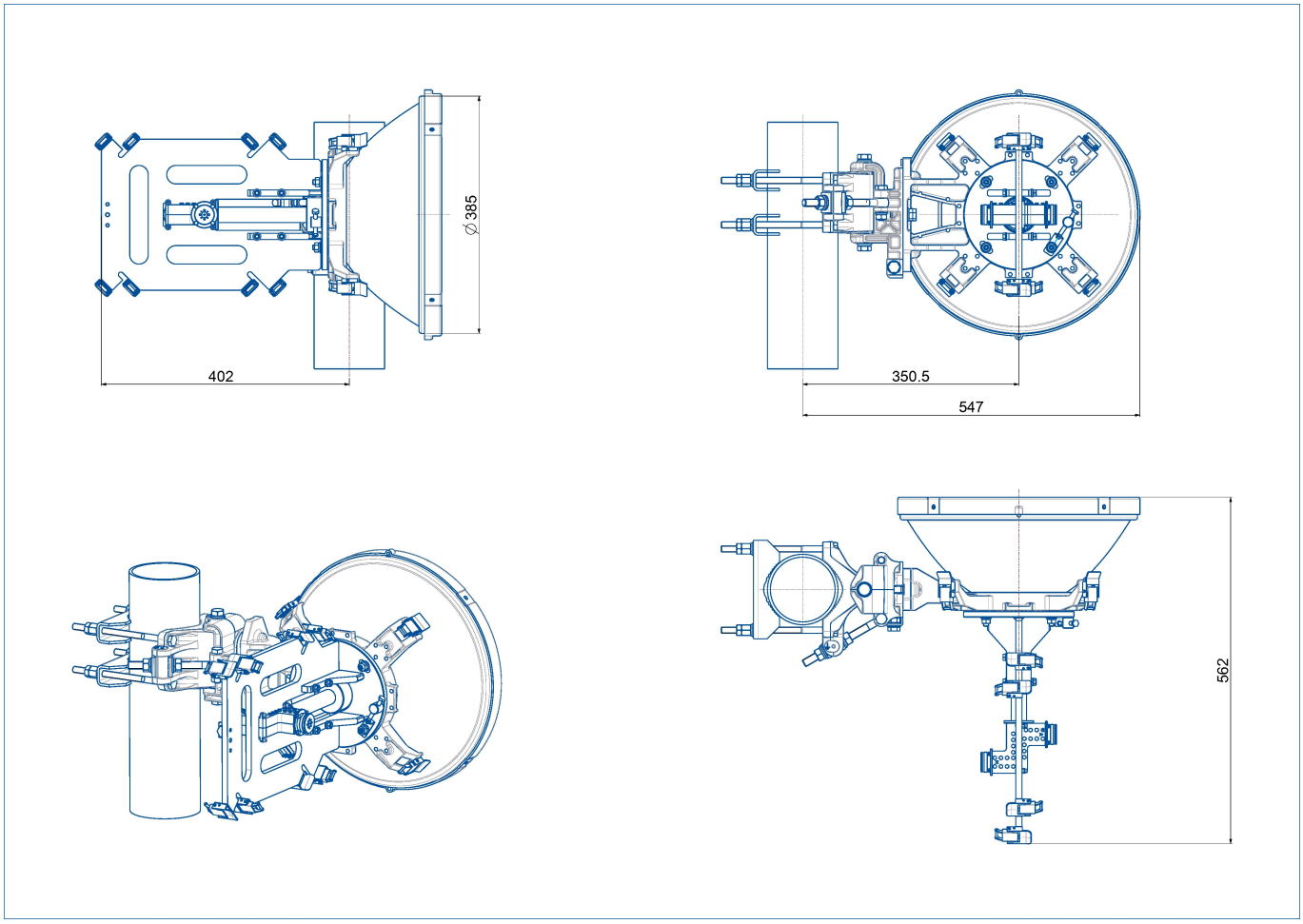
Mechanical Characteristics

Pole	50 - 115 mm
Elevation-fine adjustment	+/- 15 deg
Azimuth-fine adjustment	+/- 20 deg
Side struts, included	0
Side struts, optional	0
Net weight	11 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	562 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

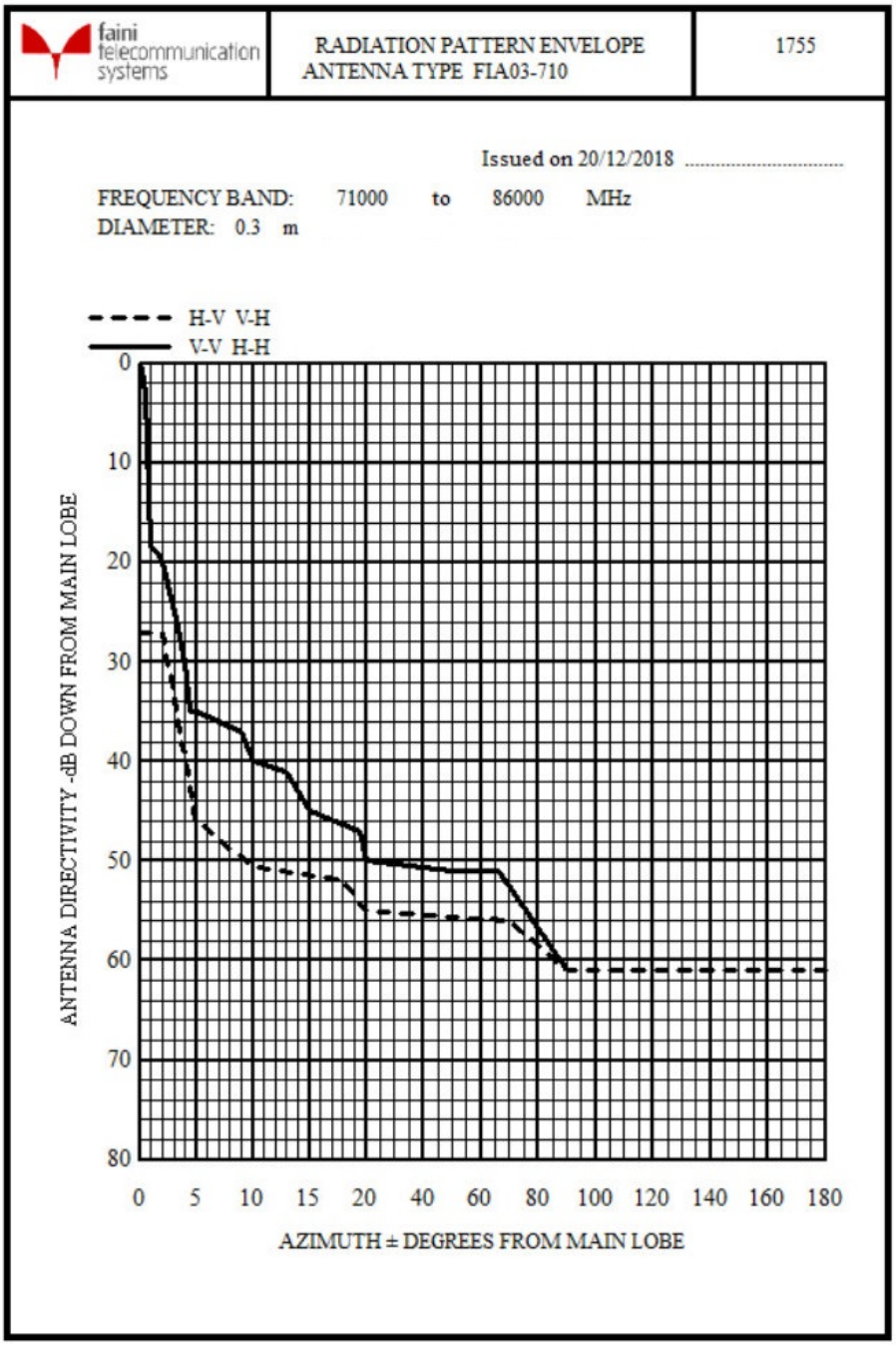
Maximum forces exerted on a supporting structure as a result of wind (survival rating) from the most critical direction for each parameter. These values may not occur simultaneously. All forces are referred to the mounting pipe of 115 mm diameter.

Electrical Characteristics

Frequency range	71-86 GHz
Gain, low band	43.5 dBi (external OMT insertion loss included)
Gain, mid band	44.0 dBi (external OMT insertion loss included)
Gain, top band	44.5 dBi (external OMT insertion loss included)
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	13 Kg
Height	600 mm
Depth	400 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