2.4 - 2.8 GHz Grid Antenna

order no. 18685.24

Robuste Alu-Gitterspiegel für 2.4 GHz WLAN.
Die WLAN-Gitterspiegel aus gegossenem Aluminium kombinieren sehr hohe Stabilität und geringe Windlast für lange Einsatzdauer der Antennen. Die speziell entworfenen Spiegelformen bieten ca. 26dBi Gewinn. Durch die geteilte Bauform des 90x70cm Spiegels ist das Packmaß besonders klein, das wirkt sich positiv auf die Versandkosten aus. Eine Neige/Schwenkhalterung für Mastmontage ist im Lieferumfang enthalten. Anschluß: N-Buchse.

Rugged WiFi grid dish antennas
The 90 cm x 70 cm grid reflector yields a 2.4 GHz grid with gain of 26 - 27 dBi which is about 3 dB higher than equivalent products. New parabolic 90 x 70 cm aluminium diecast grid, very rugged and insensitive to harsh weather conditions. The design is such that the grid is moulded in two halves (split-design) which results in a 65% reduction in packaging volume. The feed design also optimises aperture efficiencies which gives significantly higher gain when compared to similar grid antennas.

Features:

- UV Resistant powder coat finish
- Rugged outdoor construction
- Quick and easy installation
- Light weight and low wind resistance
- Azimuth and elevation continuous adjustment

Application:

- Ultra-secure wireless LAN point-to-point communication
- Can be used as client antennas in a wireless network or in similar proprietary standards operating in the 2.4 – 2.8 GHz frequency band.
- Long range CPE installation
- Long range Point-to-Point Links

WiMo Antennen und Elektronik GmbH

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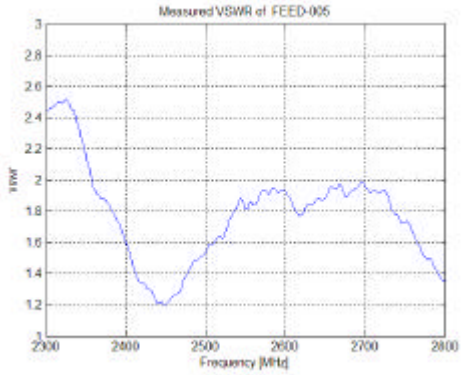
Specifications:

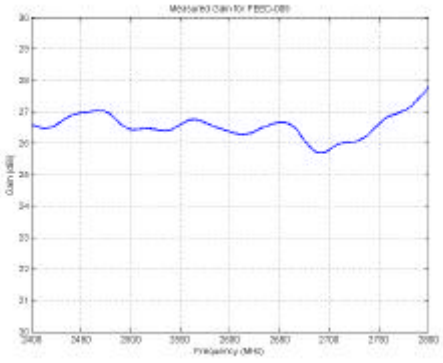
Electrical:	
Gain (max)	27 dBi (+-0.5 dB)
Gain (min over the band)	26 dBi (+-0.5 dB)
Frequency	2400 - 2800 MHz
VSWR (2400-2500 MHz	< 2.0:1
(2500-2800 MHz)	< 2.5:1
Feed power handling	10 W
E-plane 3 dB beamwidth	11° (± 5°)
H-plane 3 dB beamwidth	8° (± 5°)
Front to back (F/B ratio)	>30 dB (± 2 dB)
Nominal input impedance	50 Ohm
Polarisation	Linear
Connector:	N female

Environmental:	
Wind Loading	160 km/h
Temperature Range	- 20° C to +70° C
Shock	40G at 10 msec
Salt spray in accordance with test method	No 72 Din 50021
Water Ingress Rating	IP65 (NEMA 4X)
Thermal Shock	- 20° C to +70° C : 10 cycles
Mechanical:	
Actual reflector Dimension	90 cm x 70 cm
Dish focal length	30 cm
Weight	3.3 kg
Dish Material	Diecast Aluminium
Bracket	High strength with elevation And Azimuth tilt

VSWR and Gain Pattern:

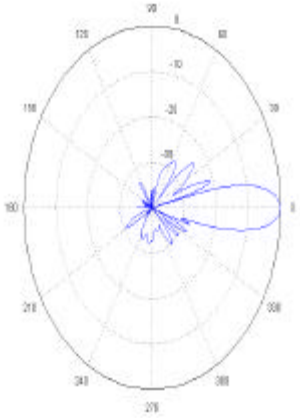


VSWR

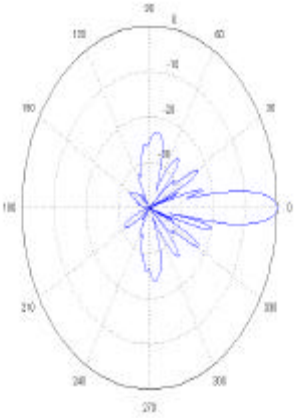


Gain

Radiation Patterns



E-Plane



H-Plane

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Installation Instructions

- For vertical polarisation install as shown in figure 1.
- Attach the L bracket to the Grid Dish by means of the four M6 bolts and star washers provided.
- For horizontal mounting of the Grid, mount the Bracket as indicated in figure 2.
- Whereas to obtain different tilt angles, mount Bracket as indicated in figure 3.
- Once the Grid is mounted the appropriate Feedcan be installed.
- The Feed is linearly polarized and should be vertical when mounted on the Grid Dish.
- Ensure that the Dish is fastened together correctly and the Pole mount bracket is properly secured to the dish. Vertically align the inserts on the Feed base with those of the Grid dish then fasten the screws through the Pole mount bracket. Note that the Feed can easily be mounted on the Grid Dish while the dish is already mounted on the mast. See figure 4.
- Strain relieve the Feed cable to the mast with a cable tie or weatherproof tape.
- Connect the antenna to the radio device.

Packing list

Item	Description	Quantity
1	GRID halves	2
2	FEED: Housing assembly	1
3	FEED: M6 x 16 Hex bolts	12
4	FEED: M6 Star washer	12
5	FEED: M6 Nut	10
6	Mast bracket	1
7	bracket	2
8	M6 x 90 U-bolt	2
9	M6 Star washer	4
10	M6 Nut	4

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Fig 1: attaching the mast bracket to the grid

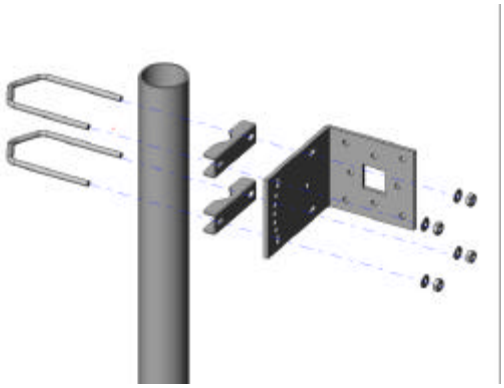

fig 2: horizontal mounting

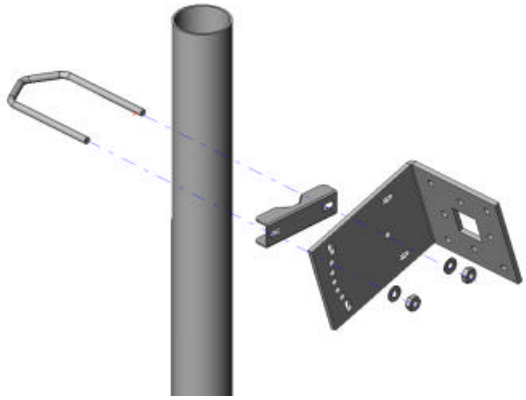

fig 3: different tilt angles

fig 4: feed mount

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