

ALL mXTEND™ (FR01-S4-220)

GSM, UMTS, LTE (698 – 960MHz and 1710 – 2690MHz)

Fractus Antennas specializes in enabling effective mobile communications. Using Fractus Antennas technology, we design and manufacture optimized antennas to make your wireless devices more competitive. Our mission is to help our clients develop innovative products and accelerate their time to market through our expertise in antenna design, testing and manufacturing.

The ALL mXTEND™ chip antenna component has been specifically designed for providing multiband performance in wireless devices (in particular in mobile devices), enabling worldwide coverage by allowing operation in the communication standards GSM850, GSM900, GSM1800/DCS, GSM1900/PCS, UMTS, LTE700, LTE800, LTE850, LTE900, LTE1700, LTE1800, LTE1900, LTE2000, LTE2100, LTE2300, LTE2500 and LTE2600. The ALL mXTEND™ chip antenna component is built on glass epoxy substrate.

Bands: LTE 1-10, LTE 12-20, LTE 23, LTE 25-30, LTE 33-41, LTE 44.

Product Benefits

- Small size
- Cost-effective
- High efficiency
- Easy to use (pick and place)
- Multiband behavior (worldwide standards compatible)
- Off-the-Shelf
- Standard Product (no customization is required)

24.0 mm x 12.0 mm x 2.0 mm (image larger than real size)



PAT. US 9,130,259 B2, US 8,237,615 B2

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Evaluation Boards

Class	Frequency range	Technology	Part Number	Page
1 Port	698 – 960 MHz & 1710 – 2690 MHz	With UFL cables	EB_FR01-S4-220-1B-2R-1P	2

1 port solution – 2 frequency regions

Technical features	698 – 960 MHz	1710 – 2690 MHz
Average Efficiency	> 55 %	> 75 %
Peak Gain	2.3 dBi	3.1 dBi
VSWR	< 3:1	
Radiation Pattern	Omnidirectional	
Polarization	Linear	
Weight (approx.)	1.23 g.	
Temperature	-40 to + 85 °C	
Impedance	50 Ω	
Dimensions (L x W x H)	24.0 mm x 12.0 mm x 2.0 mm	

Technical features. Measures from the evaluation board with UFL cable (142 mm x 60 mm x 1 mm).

See pictures of the evaluation boards, matching network configuration and graphs of the specs in the [User Manual](#).

For additional information, please visit www.fractusantennas.com or contact info@fractusantennas.com.