

Dual Band Switched Beam Antenna for 2.4 and 5GHz

SBA2456DB

The SBA2456DB is a dual band switched beam antenna covering the full 2.4 and 5 GHz frequency bands (WiFi). The antenna beam can be steered to achieve optimal gain to the desired direction and to avoid interference from unwanted directions. The antenna provides 24 sharp beams with a minimum of 20-degree beamwidth to cover the full 360-degree horizontal area. The antenna provides superior gain performance with low side lobe levels. Its extremely fast beam switching ability makes the antenna suitable for UAV/drone detection and counter measures.

- Great directivity with very low side lobe levels
- Sharp and omni beam modes available
- Fast beam switching by using RS-485 or Ethernet based communication



Product details*	
Frequency range	2400 - 2500 MHz and 5000 – 6000 MHz
Polarization	Nominally vertical
Antenna type	Switched beam antenna
Radiation pattern	Directional and omni (Sharp and omni beam modes)
Gain (typical)	10 - 12 dBi @ 2.4 - 2.5 GHz 12-15 dBi @ 5.0 - 5.9 GHz
3 dB beamwidth (typical)	2.45 GHz: 45° (H-plane), 30° (E-plane) 5.8 GHz: 25° (H-plane), 13° (E-plane)
Sidelobe level (typical)	-12 dB (H-plane)
VSWR	≤ 2.5
Nominal Impedance	50 Ω
Power rating **	10 W (CW & Peak)
Power supply	19 – 32 VDC (<200 mA), MIL-STD-1275E
Beam switching speed	< 1 μs
Standard color	Black
Radiator	Selectable patch array element, 24 elements
Height	405 mm (including the mast mount adapter)
Diameter	320 mm
Weight	4.6 kg

** Cold switching

Installation*	
RF connection	Female N-type connector
Mounting	Mast mount adapter for 40-60 mm masts included

Order number	
SBA2456DB	Antenna as described above
SBA2456DB-M	Antenna with vehicle mount flange *

* More information on request