

Steerable Beam Antenna for 4400-5000MHz

SBA4450B

The SBA4450B is a steerable beam antenna for the 4400 to 5000 MHz frequency band (SHF band IV). The antenna beam can be steered to achieve optimal gain to the desired direction and to avoid interference from unwanted directions. The antenna provides up to 20 sharp beams with a minimum of 20-degree beamwidth to cover the full 360-degree horizontal area. In addition to these sharp beams the antenna can also provide wider beams. Its extremely fast beam switching ability makes the antenna suitable for complex node network in tactical communication.

- Great directivity with very low side lobe levels to undesired direction (LPI/LPD)
- Different beam modes available
- Fast beam switching by using RS-485 or Ethernet based communication



Product details*	
Frequency range	4400 - 5000 MHz
Polarization	Nominally vertical
Antenna type	Steerable beam antenna
Radiation pattern	Directional and omni (sharp, wide and omni beams)
Gain	14 dBi
3 dB beamwidth (typical)	25° (H-plane), 14° (E-plane)
Sidelobe level (typical)	-14 dB
VSWR	≤ 2.0
Nominal Impedance	50 Ω
Power rating	10 W (CW)
Power supply	19 – 32 VDC (<200 mA), MIL-STD-1275E
Beam switching speed	< 1 μs*
Standard color	Black
Radiator	Selectable patch array element, 20 elements
Height	390 mm (including the mast mount adapter)
Diameter	290 mm
Weight	4.1 kg

Installation*	
RF connection	Female N-type connector
Power and control	MIL-DTL-26482, Shell size 12
Mounting	Mast mount adapter for 40-60 mm masts included

* More information on request

Order number	
SBA4450B	Antenna as described above
SBA4450B-M	Antenna with vehicle mounting flange
SBA4450B-GPS	SBA4450B with integrated GPS antenna