

Dual Polarized Switched Beam Antenna for 4400-5000MHz

SBA4450B-DP

The SBA4450B-DP is a switched beam antenna for the UHF IV (4400 to 5000 MHz) frequency band providing output for vertical and horizontal polarization to support MIMO usage. The antenna beam can be switched by remote control to achieve optimal gain to the desired direction and to avoid interference from unwanted directions (LPI/LPD). The antenna provides up to 20 beams with a minimum of 18 degree beamwidth to cover the full 360 degree horizontal area. Its extremely fast beam switching ability makes the antenna suitable for complex node network in tactical communication.

- Optimal gain to desired direction and interference avoidance from unwanted directions (LPI/LPD)
- Dual polarization for MIMO usage
- Fast beam switching by using RS-485 or Ethernet based communication



Product details*	
Frequency range	4400 - 5000 MHz
Polarization	Vertical and Horizontal
Antenna type	Switched beam antenna
Radiation pattern	Directional (see typical patterns on Page 2)
Gain (typical)	14 dBi
3 dB beamwidth, VP & HP	E-plane 15°, H-plane 25° (typical)
Sidelobe level (typical)	-12 dB
VSWR	≤ 3.0
Nominal Impedance	50 Ω
Power rating	10 W (CW)
Power supply	19 – 32 VDC (<200 mA), MIL-STD-1275E
Beam switching speed	< 1 μs (see information on Page 3)
Standard color	Black
Radiator	20 x selectable dual polarized patch array element
Height	435 mm (including the mast mount adapter)
Diameter	320 mm
Weight	5.3 kg

Installation	
RF connection	2 x Female N-type connector
Power and control	See information on Page 3
Mounting	Mast mount adapters for 40-60 mm masts included **

* More information on request

** Vehicle mount option available

Order number	
SBA4450B-DP	Antenna as described above