

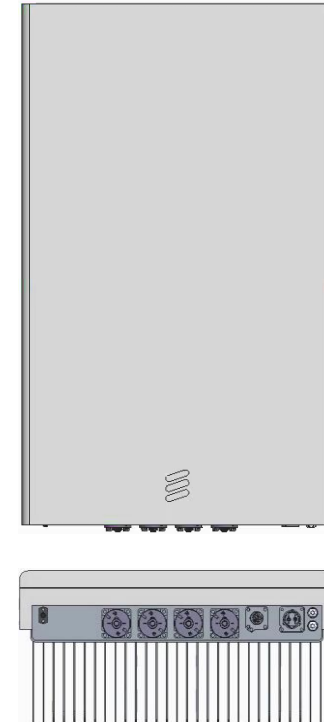
AIR 6449 description



AIR 6449



- Advanced Antenna System (AAS)
- 64TX/RX with 192 AE
- Upto 320W total output power
- EIRP 79 dBm
- 200 MHz IBW&CBW
- 4 x25Gbps (compatible to 10G) eCPRI SFP28
- Weight: ~ 50 kg (band depended)
- Size (H x W x D): ~ 841 x 522 x 211 mm
- -48 VDC 3-wire (possible to connect as 2-wire)
- -40 to +55°C



Downlink broadcast beams - Macro General



- Macro scenario feature vertical digital tilt
 - Fixed tilt in horizontal direction
- Two orthogonal beams BrM1 and BrM2 for LTE
- One beam BrM1 for NR

Scenario: Macro	Beam LTE	Beam NR
Parameters	BrM1, BrM2	BrM1
Vertical Beamwidth	$6\pm1^\circ$	$6\pm1^\circ$
Horizontal Beamwidth	$65\pm5^\circ$	$65\pm5^\circ$
Digital downtilt	-3° to 11°	-3° to 11°
Vertical beam pointing error	$\leq 1^\circ$	$\leq 1^\circ$
Horizontal beam pointing	$0\pm5^\circ$	$0\pm5^\circ$
Vertical side lobe suppression	15 dB	15 dB
Front to back ratio	25 dB	25 dB
Beam parallelity (BrM1 • BrM2)	≤ -10 dB	-NA-
EIRP (typical)	2x70 dBm	1x73 dBm

Traffic beams



- The traffic beams in this presentation are generated with uniform excitations
 - The traffic beamforming of the product is not restricted to these beams since they are dynamically optimized for LTE.
- For NR the beamforming for traffic beams is done by CSI-RS and code book.
- However, the presented beams shows an approximation to actual beams in both cases.

The table present performance for three example directions

– Horizontal and vertical radiation patterns on next slide

Uniform traffic beams	Direction		
Parameters	H0V6 deg	H55V6 deg	H0V19 deg
Vertical Beamwidth	6°	7°	6°
Horizontal Beamwidth	12.5°	21°	13°
Peak EIRP (typical)	2x77 dBm	2x74 dBm	2x74 dBm
EIS (typical)	-128 dBm	-125 dBm	-125 dBm

