



AAU- LAU9560

Product Description

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FCC compliance statement



changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure statement

FCC ID: 2AVFNLAU9560

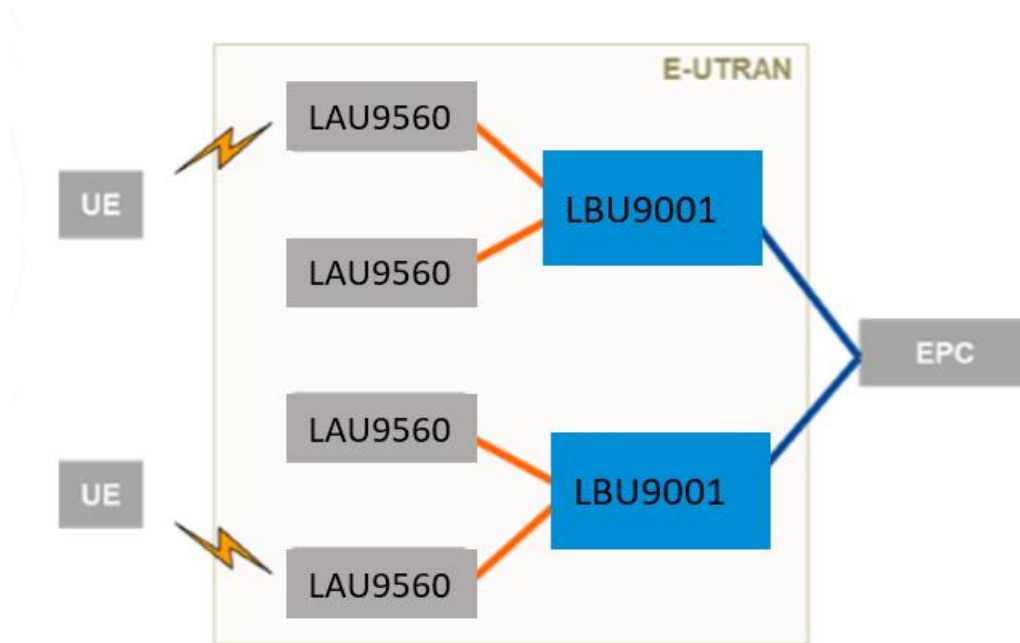
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 10m between the radiator and people near the equipment when used in commercial network.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

1. Overview

The location of LAU9560 and LBU9001 in 4G network is shown in Figure



1.1 Appearance

LAU9560 is an AAU integrated with an integrated high power RF unit and antenna array. The appearance of LAU9560 is shown in Figure 1-1.



Figure 1-1 LAU9560 Appearance

Notes:

LAU9560 supports operation of 4G-LTE

1.2 Physical Interface

The operational interfaces of LAU9560 is inside the side maintenance window, and the interface is shown in Figure 1-2.

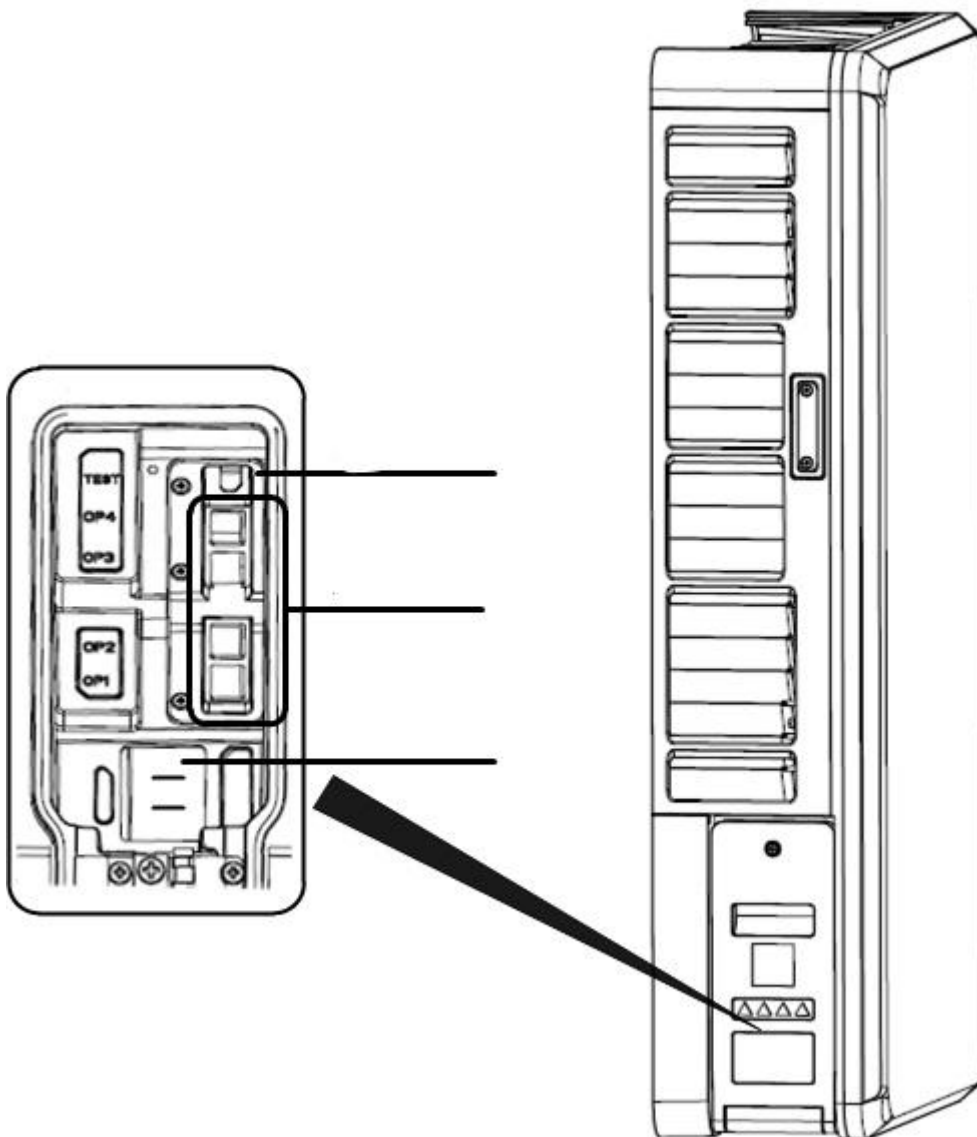


Figure 1-2 LAU9560 Interfaces

Table1- 1 LAU9560 External Interfaces

Interface name	Label	Interface type	Quantity	Remark
Commissioning port	TEST	HDMI	1	Located in the maintenance window

IR Fiber interface	OP1-4	SFP28	4	Located in the maintenance window
Power interface	PWR		1	Located in the maintenance window

1.3 LED Indicator

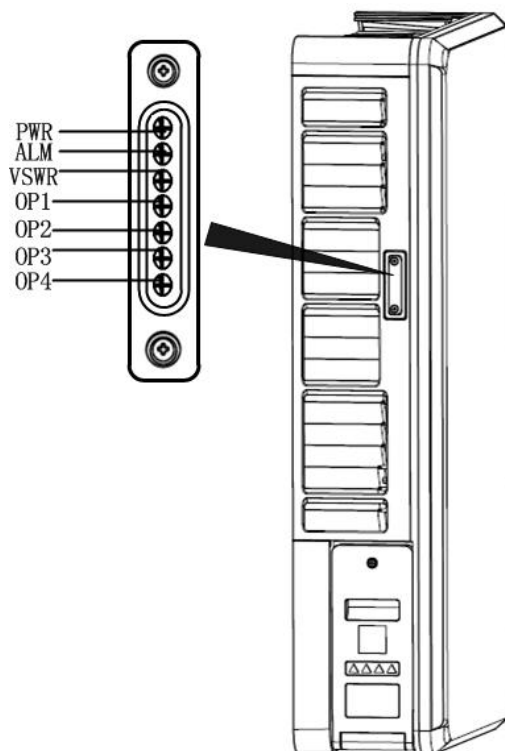


Figure 1-3 LAU9560 Indicator

The LED Indicator definitions are listed in Table 1-2.

Table 1-2 LAU9560 Panel LED Definition

Title	Full Spell	Color	Status	Definition
PWR	Power lights	Green	Bright	Power correct, power on normal
			Out	Power-on abnormal
ALM	Warning lights	Red	Bright	Issues with the device
			Out	Device in good condition
VSWR	RF channel	Green	Bright	Power-on channel device self-test correct, no VSWR warning
			Out	VSWR exception
OP1-4	IR Fiber-optic port	Green	Bright	Optical port correct
			Out	Fiber loss of lock, or loss of synchronization steps, or low power, or TXFAULT

2. Technical Specifications

2.1 Frequency band

The frequency bands that LAU9560 support and will support are listed in the table below:

Table 2-1 LAU9560 Frequency Band

Model	Frequency band	Rx (MHz)	Transmit frequency band (MHz)	Frequency Range (MHz)
LAU9560	B41/n41	2496-2690	2496-2690	194

2.2 Capacity

The table below lists the capacity indices:

Table 2-2 LAU9560 Capacity index

Item	Indices
LTE carriers	20MHz
DL throughput	320Mbps
UL throughput	32Mbps
Number of connected users	2400
Number of active users	800

2.3 Receiving Sensitivity

The receiving sensitivities of LAU9560 in LTE mode is listed in the table below:

Table 2-3 LAU9560 Receiving Sensitivity

Working Modes	Receiving Sensitivity (dBm)
LTE mode	≤-103

2.4 Output power

The maximum ToC output power is listed in the table below:

Table 2-4 LAU9560 Output power

Model	Max Output Power (W)
LAU9560	240

2.5 Power consumption

The table below lists the power consumption of the AAU in different system loads:

Table 2-5 LAU9560 Power consumption

Model	Power consumption (W)
-------	-----------------------

LAU9560	1000 (with 100%PRB)
	770 (with 50%PRB)
	500 (Under no load)

2.6 Interface capabilities

The external interface information for backhaul are listed in the table below:

Table 2-6 LAU9560 Interface capabilities

Model	# of Optical Interfaces	Optical Interface Speed	Transmission Distance
LAU9560	4	25Gbps	10km

2.7 Antenna Specifications

The antenna array of LAU9560 is composed of 64 Tx/Rx channels, please see details in the table below:

Table 2-7 LAU9560 Antenna Specifications

Model	Working frequency	Number of antenna	Horizontal Beamwidth	Vertical Beamwidth
LAU9560	2496-2690MHz	64 antenna	±60°	6±13°

Antenna Gain:17dBi

2.8 Power supply

The table below lists the information of the input power supply:

Table 2-8 LAU9560 Input Power supply

Model	Input Power supply
LAU9560	DC: -48V (Voltage fluctuation range -57V~-40V)

2.9 Installation method

LAU9560 supports flexible outdoor installations, listed in the table below:

Table 2-9 LAU9560 Installation methods

Model	Installation method
LAU9560	Pole installation, wall mounting

2.10 Physical Specifications

The physical dimensions of the AAU are listed in the table below:

Table 2-10 LAU9560 Physical Specifications

Model	Dimensions (H*W*D)	Weight	Volume
LAU9560	868mm×489mm×187mm	<42kg	75L

Appendix: Acronyms

Abbreviations	Full Spell
3GPP	3rd Generation Partnership Project
AAU	Active Antenna Unit
AC/DC	Alternating Current/Directing Current
AISG	Antenna Interface Standards Group
BBU	BaseBand Unit
CPRI	Common Public Radio Interface
GPS	Global Positioning System
NAVSTAR	Navigation Satellite Timing and Ranging/
LMT	Local Maintenance Terminal
TDD	Time Division Duplex