

S618

mesh⁺

Solar-powered 2x2 WiFi 6 Router | Modular for any last-mile application

- Range of up to 350m line-of-sight¹
- Supports 25-500 users²
- Battery life up to 10 days
- IP67 waterproof³
- 10-minute installation

Options

- GPS
- 2GB RAM upgrade
- 4x4 WiFi 6E radio
- LoRaWAN modem
- 4x4 WiFi 6E radio
- 4G LTE / 5G cellular modem
- 802.3af/at Power over Ethernet
- 1.2kWh battery (up to 10 days)

Processing

CPU	1.8GHz quad-core ARM A53
Memory	1GB (up to 2GB)
Boot Type	32MB NOR flash, 128MB NAND flash
Packet Processor	UBI32, 12 threads, 1.5GHz
Wired Connectivity	2x USB 2.0, RJ45 Gb LAN/WAN

Security

Wireless encryption	WPA, WPA2, WPA/WPA2, WPA2 Enterprise, WPA3
Traffic Management	AP Isolation, Per-User Rate Limiting
Authentication	RADIUS
Network features	NAT, DHCP
Mesh encryption	WPA2

Power

Power Delivery	60W USB-C PD
Power over Ethernet	13W 802.3af/at
Solar	18Vmpp 4A
Solar Panel	75W (stock), 40-100W
Adapter	12V 5A
Batteries	18650 lithium-ion, 894Wh (stock) – 1.2kWh

Physical

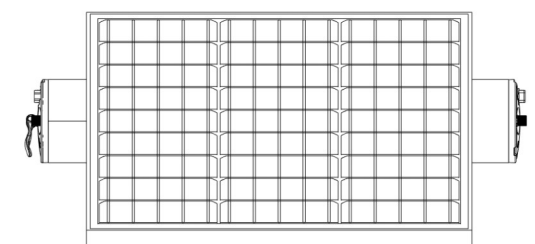
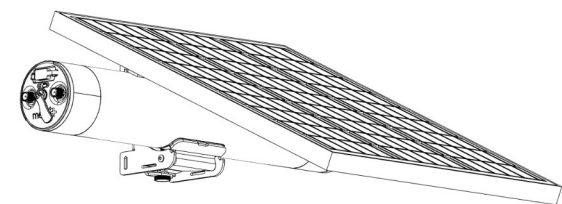
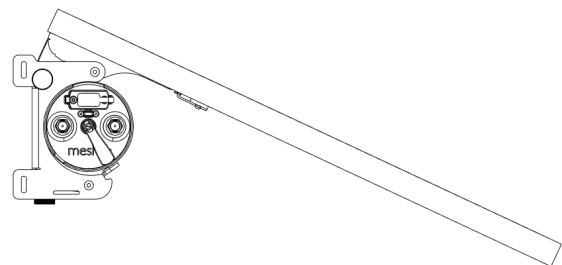
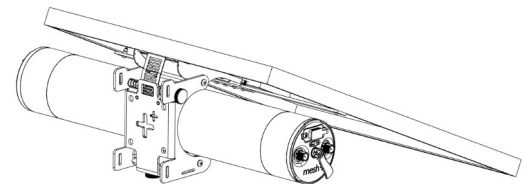
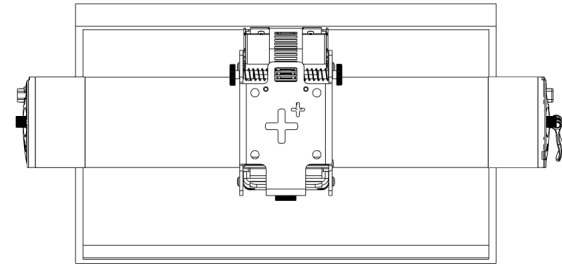
Dimensions	110mm diameter * 640mm length + solar panel
Weight	7kg
Ingress Protection	IP67
Max. Wind speed	60kph
Humidity	5% - 95%, non-condensing
Temperature	-25C to 50C (storage) -20C to 40C (operation) -10C to 30C (charging)

¹Without any additional interference, at a height of 3 meters. Test throughput 10Mbps.

²Depends on use case. Approximately 25 users for video streaming, up to 500 under singular use.

³IP67 submersible in 1 meter for up to 30 minutes.

•OPTIONAL



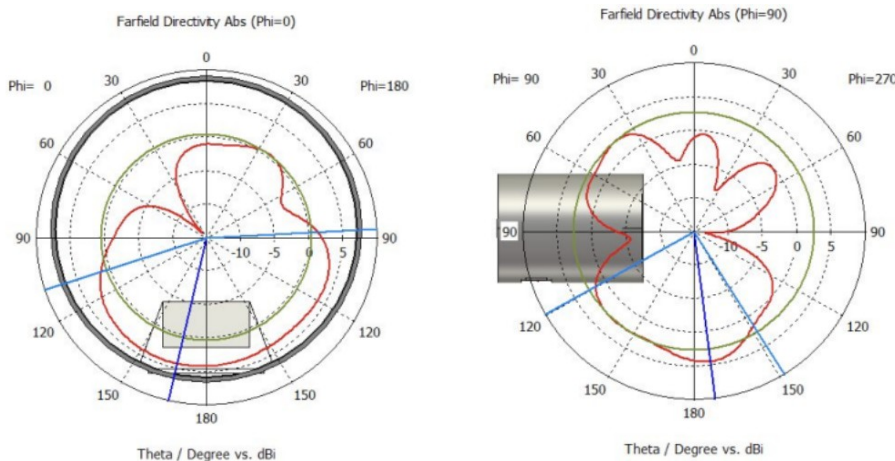
Wireless

2.4GHz	2x2 802.11b/g/n/ax 27dBm/chain (574Mbps)
6GHz	4x4 802.11ax 23dBm/chain (5Gbps) ⁺
5.8GHz	2x2 802.11a/n/ac/ax 25dBm/chain (1201Mbps)
WiFi Driver	Qualcomm ath11k
Bluetooth	Bluetooth 5
Cellular	CAT4-CAT20 4G LTE or sub-6GHz 5G dual-SIM ⁺
Antennas	4x 6GHz N-type female
SSIDs	Maximum 4 independently-controlled SSIDs
Hidden SSID	Supported

SU-MIMO 2 streams, 1 user
DL MU-MIMO 2 streams, 2 users
ULMU-MIMO STA mode only, 2 streams, 2 users
DL-OFDMA 8 users
UL-OFDMA 4 users

Beam Patterns

2.4GHz



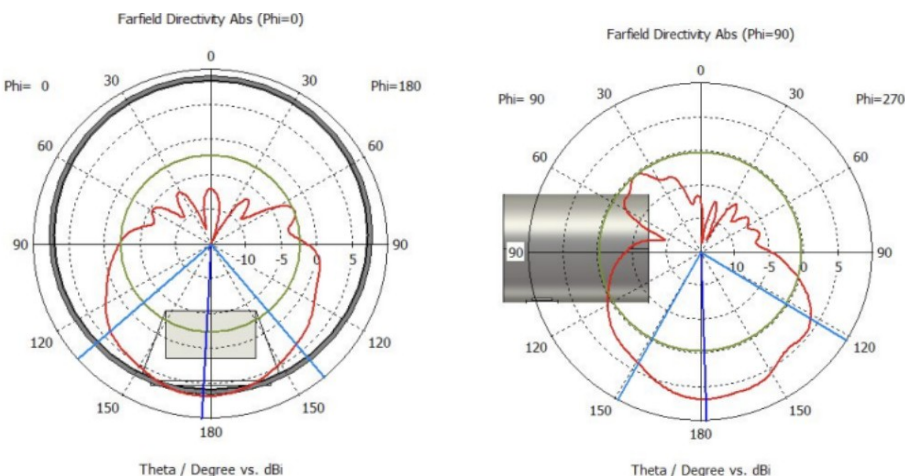
TX Power (per chain)

+16 dBm HE40 -47dB DEVM
+19 dBm HE40 -43dB DEVM
+24.5 dBm MCS9 HT40 -35dB DEVM
+26 dBm MCS7 HT20/40 -30dB DEVM
+28 dBm MCS0 HT20

RX Sensitivity

-69.0 dBm (VHT40/MCS9/2SS)
-63.0 dBm (VHT40/MCS11/2SS)
-68.5 dBm (HT40/MCS9/2SS)
-63.0 dBm (HE40/MCS11/2SS)

5.8GHz



TX Power (per chain)

+16dBm MCS11 HE80 -47dB DEVM
+18dBm MCS11 HE80 -43dB DEVM
+23dBm MCS9 VHT80 -35dB DEVM
+24dBm MCS7 HT20/40 -30dB DEVM
+26dBm MCS0 HT20

RX Sensitivity

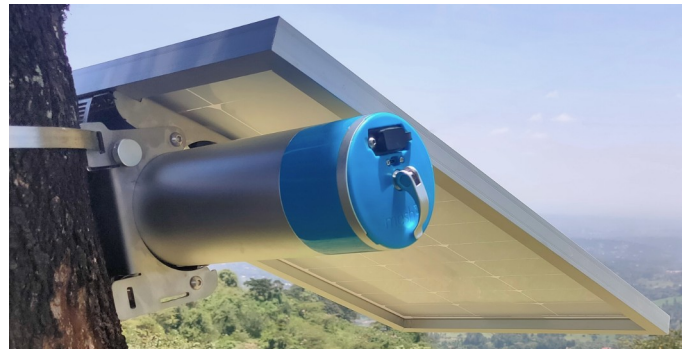
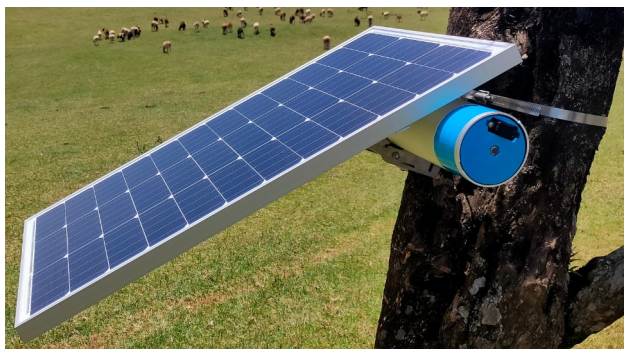
-64.5 dBm (VHT80/MCS9/2SS)
-59.0 dBm (VHT80/MCS11/2SS)
-64.0 dBm (HE80/MCS9/2SS)
-58.0 dBm (HE80/MCS11/2SS)

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Photos



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Internal Diagrams

