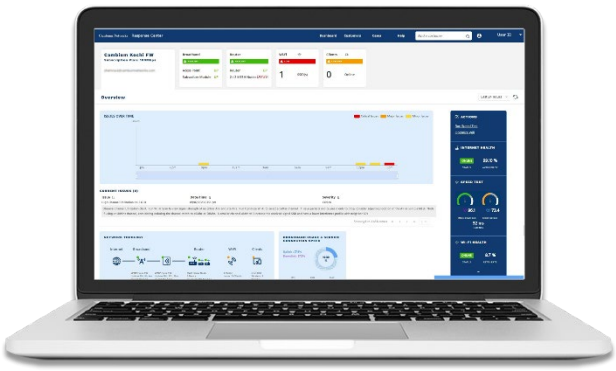
RV22 Wi-Fi 6 Home Mesh Router

With cnMaestro™ Response Center and Subscriber App

RV22 Quick Look

- 802.11a/b/g/n/ac, ax
- 5 GHz (3x3:2); 2.4 GHz (2x2:2)
- 4 x GbE RJ45 interface
- 12VDC, 2.5mm CP, P/S





cnMaestro Response Center

Response Center analytics deliver useful Insights and recommended actions to reduce the time to repair and eliminate truck rolls.

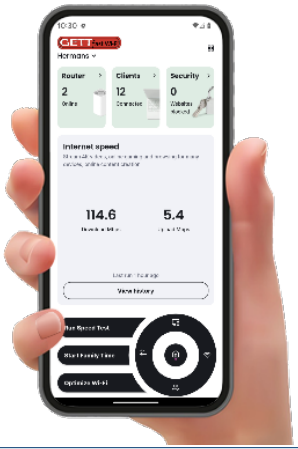
The intuitive cnMaestro subscriber workflow walks through the steps to set up a new subscriber and provision services. Use the same workflow tool to adjust managed broadband and Wi-Fi services.

- Planned release June 2024
- cnMaestro cloud micro-service
- Integrated case tracking
- Context-aware Wi-Fi Insights
- Issue → Recommendation → Actions
- Wi-Fi scanner
- Single pane-of-glass management

Self-Service Subscriber App

Empower your subscribers to be part of their own service delivery with the easy-to-use self-service Subscriber App. Curated data is clearly displayed on the dashboard, while useful tools are obvious and intuitive.

- Android or iOS
- Service Provider branded
- Self-service at your fingertip
  - Family Time
  - Web Content Filter
  - Speed Test
  - Optimize Wi-Fi



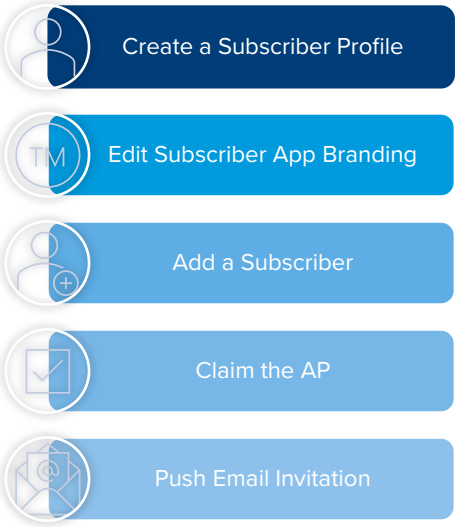
©2023 Cambium Networks, Inc.

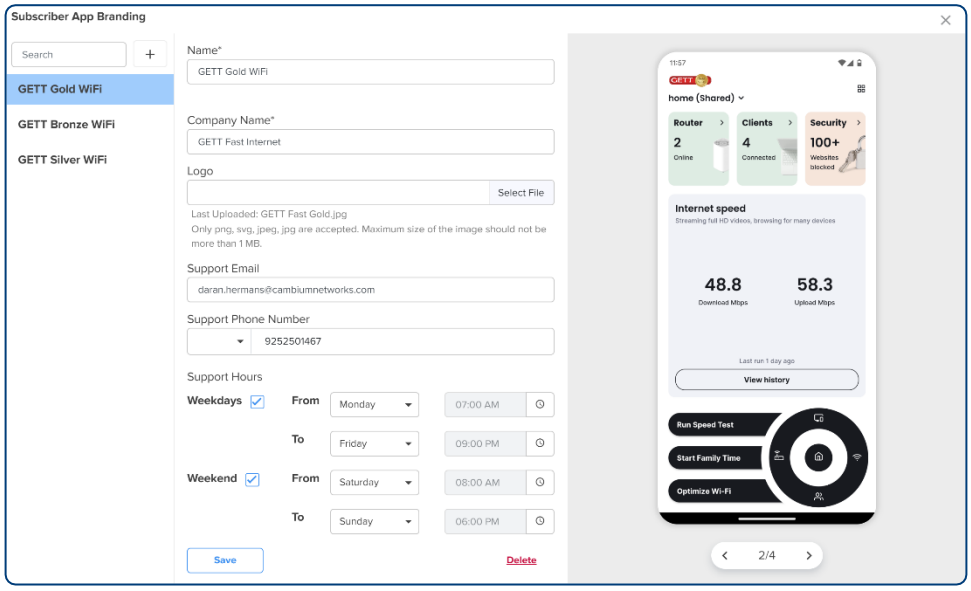
RV22 Wi-Fi 6 Home Mesh Router

Subscriber and Service Workflows

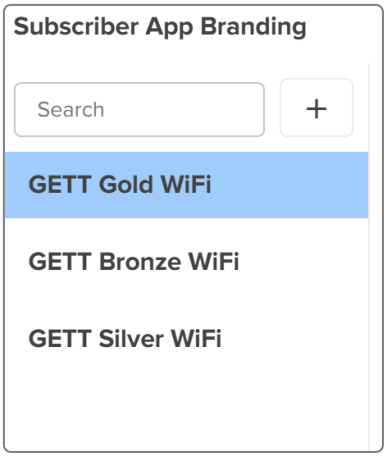
cnMaestro subscriber workflows allow the provider to create a service and link it to a person and a site. Multiple services can be created in cnMaestro with each service including custom logos, service names, support contacts, and support hours. Use the service tool to create multiple levels of service with unique branding and information.

Assign a service to a subscriber and the subscriber site. Once linked, an invitation to manage the network will be automatically generated and sent to the subscriber email address.









Create customized App logos that represent each level of service subscribed. In this example, the service provider (GETT) has a gold, silver, and bronze level.

Update customer support hours to reflect the purchased service level.

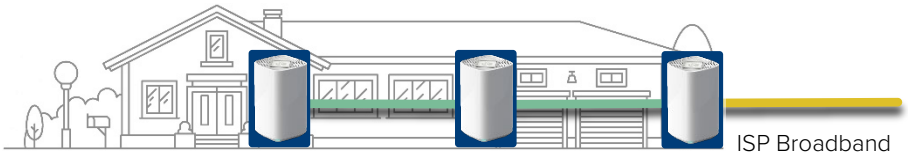
RV22 Wi-Fi 6 Home Mesh Router

Automatic Mesh

Start with a single managed Wi-Fi 6 RV22 Home Mesh Router and add mesh nodes, if needed, to cover large homes, difficult construction types, and/or RF blocking construction materials, such as brick or concrete.

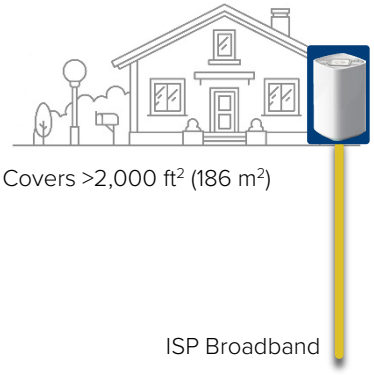
cnMaestro cloud management system informs the mesh router to look for mesh nodes. Discovery and setup are automatic. A blinking LED on the mesh node guides the subscriber to the optimal site location for the mesh node—not too close and not too far from the mesh router. The result is multi-gigabit, symmetrical mesh links delivering a great experience throughout the home.

Linear Wi-Fi Mesh



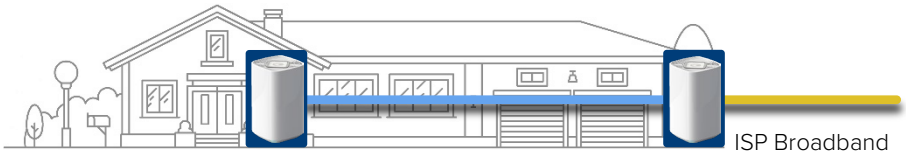
2.4 Gbps Wireless Mesh

No Mesh, Just One Great AP



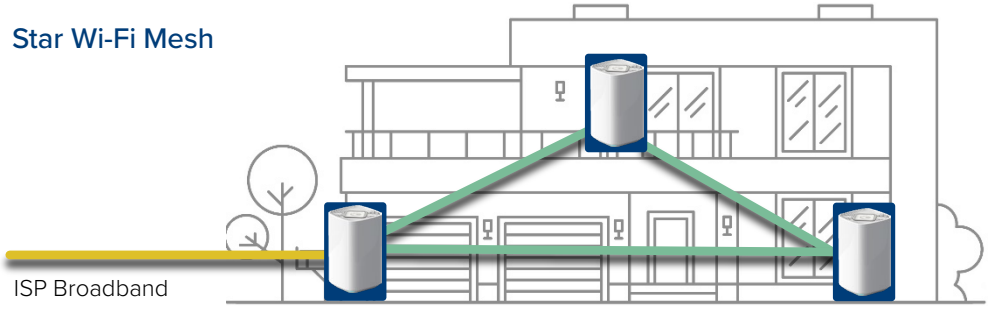
Covers >2,000 ft² (186 m²)

Wired Mesh (January 2024)



Gigabit Wired Mesh

Star Wi-Fi Mesh



2.4 Gbps Wireless Mesh

RV22 Wi-Fi 6 Home Mesh Router

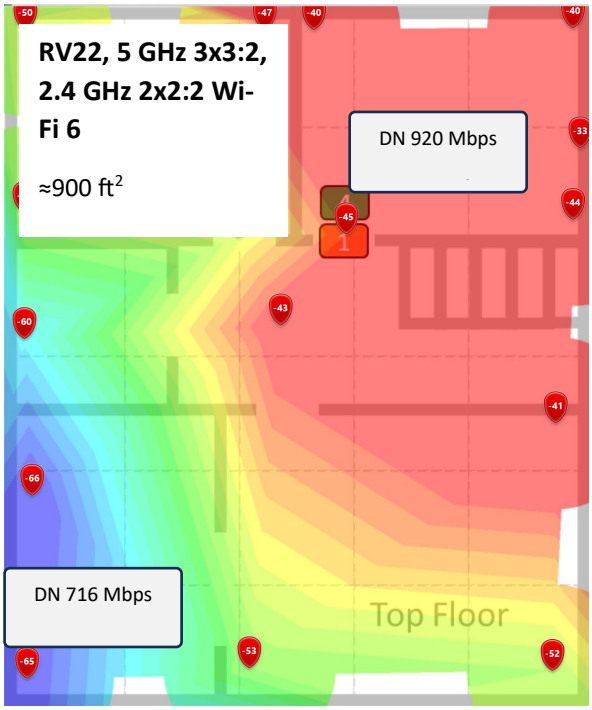
High-Power Radio Delivers Performance. Optimized Wireless Makes It Work.

Whether using a single RV22 to cover a small home or apartment or using RV22 mesh nodes for a large home, it starts with a great RF signal.

High-gain radios paired with high-efficiency antennas provide outstanding client and mesh connections. Mesh-to-mesh links range from symmetrical 1.2 Gbps to 2.4 Gbps. A third transmit-and-receive antenna provides transmit multipath and receive MRC for a more reliable Wi-Fi connection.

Frequency Coordination

Some of the fixed wireless broadband from Cambium Networks runs in the same 5 GHz band as Wi-Fi within the home. Cambium's fixed wireless subscriber modules are designed to avoid interference from the home Wi-Fi. But home Wi-Fi must remain standards-based to support the varied consumer devices that will connect. cnMaestro cloud management system coordinates the frequency selection between the RV22 Home Mesh Router and the roof-mounted subscriber module. Monitor the frequency selection and interference using the Response Center.*



Optimize RF

Upon bootup and any time the Optimize Wi-Fi command is executed, the RV22 scans channels, measures utilization, and decides whether a channel change is required. Run Optimize Wi-Fi from the Response Center* or Subscriber App.

Great Wi-Fi signal strength and low noise creates a high SNR for each subscriber client device. Easily support multiple HD video streams + web browsing + security cameras on the same system.

*Planned release: June 2024

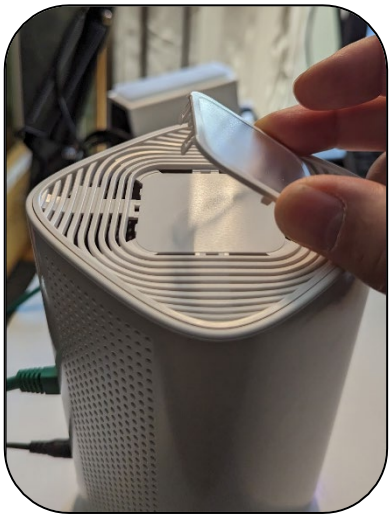
©2024 Cambium Networks, Inc.

RV22 Wi-Fi 6 Home Mesh Router

Easily Self-Brand the RV22

RV22 and the Subscriber App can be branded to match the service provider name, contact information, and brand. Once the subscriber accepts the email invitation to join your network, the Subscriber App will be updated with your service provider details from the cnMaestro workflow.

Add Your Brand to the RV22 AP



- Use a flat-head screwdriver to remove the clear plastic window.
- Slide your printed paper under the window and snap the plastic window back in place.
    - The printed paper should be 44 mm^2 (1.75 in^2).

Add Your Brand to the Subscriber App

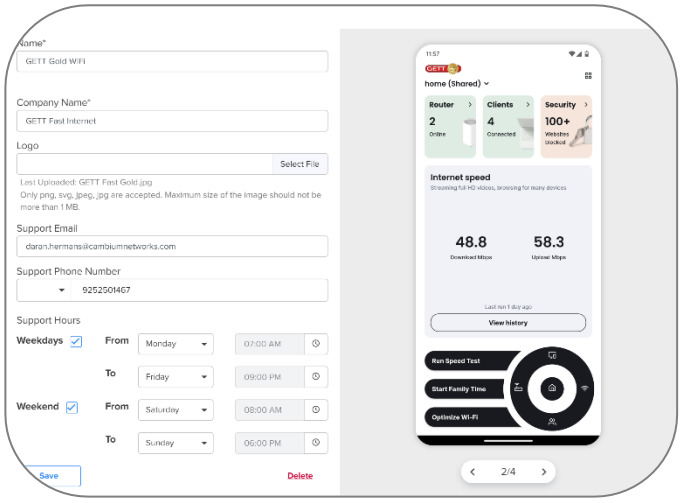
cnMaestro includes a Subscriber Workflow to add your company name, contact information, and logo. The Subscriber Workflow associates broadband services with the home Wi-Fi.

- Fixed wireless broadband template
- OLT fiber group configuration
- Wi-Fi group configuration

Create Multiple Branded Templates

Create one or multiple App templates to differentiate the service level on the App. Include the following information:

- Company name
- Company logo
- Support contact hours of operation, email address, phone number



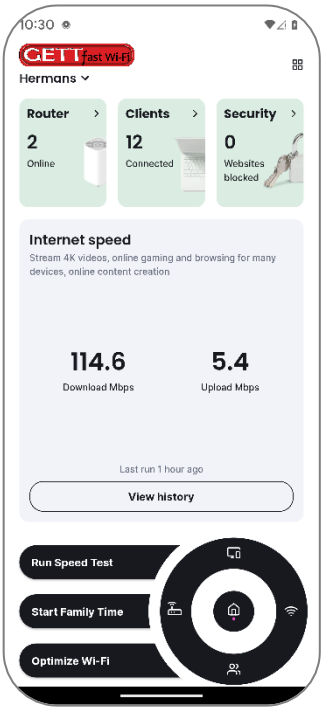
RV22 Wi-Fi 6 Home Mesh Router

Subscriber App Dashboard

The Subscriber App is designed to give your subscribers easy access to manage their home network. Using the App, the subscriber can change the network name, create a guest Wi-Fi, and manage internet access for devices within the home.

Dashboard

The dashboard displays key performance indicators (KPI) along the top, including recent speed test results and a 24-hour data graph. App navigation is at the bottom, featuring three tools that most subscribers will commonly use.



Run Speed Test

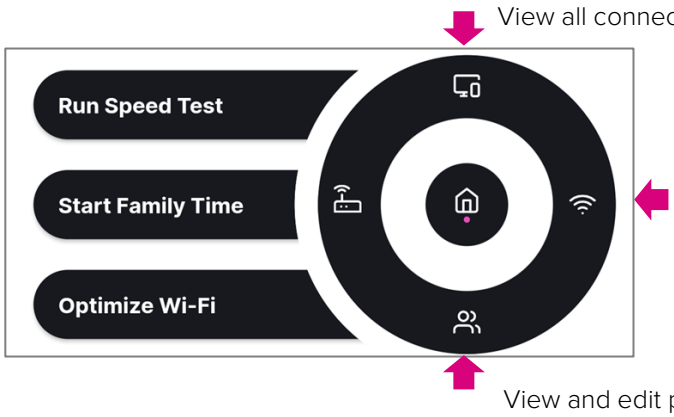
Selecting this option will initiate a Subscriber App-to-internet test, followed by a router-to-internet test. The results are shown on the app and retained on the dashboard.

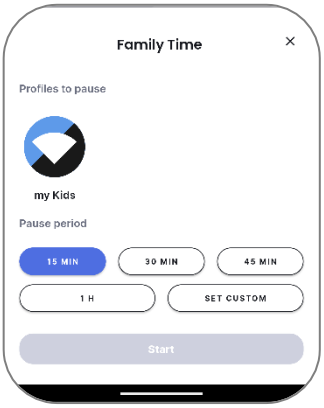
Start Family Time

This tool is a quick and effective way to pause internet use for a profile of devices. Subscribers can use this tool to quickly pause the internet, for example, at dinner time.

Optimize Wi-Fi

Optimize Wi-Fi can be run by the subscriber at any time, or it can be initiated by the support technician from the Response Center* actions.





*Planned release: June 2024

RV22 Wi-Fi 6 Home Mesh Router

Subscriber App Content Control, Profiles

With a few clicks, subscribers can collect devices into profiles and assign policies to those profiles.

Profiles

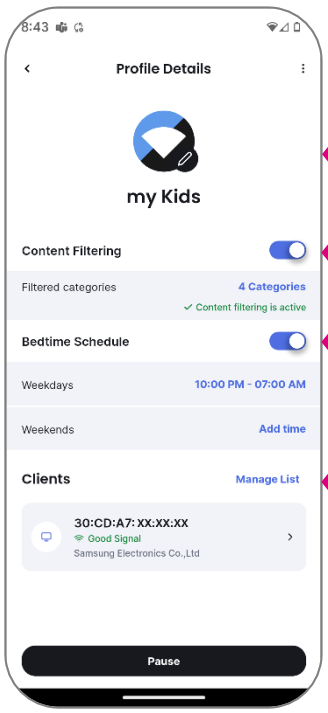
A profile is a group of client devices. Common groups of devices include Adults, Kids, and IOT. Subscribers should put all the IOT devices into the same profile so that, for example, the thermostat and doorbell do not disable when the kids go to bed. They can also configure a web content filter and/or set a weekly bedtime schedule.

Web Content Filter

The choice to enable a content filter is entirely at the discretion of the Subscriber. cnMaestro will never collect data or know anything about this selection. Once enabled, subscribers can monitor blocked events on the dashboard security widget. The web content filter cannot be enabled, disabled, or monitored from cnMaestro.

Bedtime Schedule

Subscribers can use this tool to set up a weekly schedule for internet access. Once applied to the profile, devices within that profile will be allowed to access the internet during approved hours.

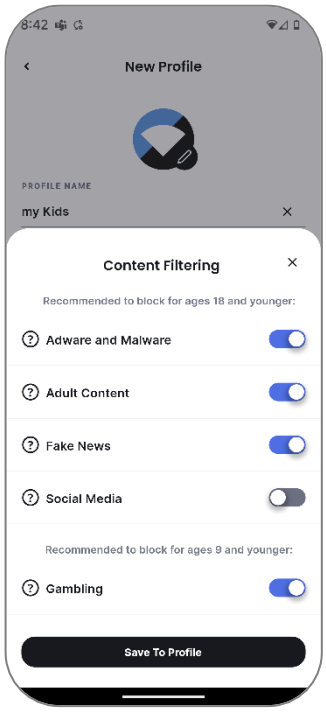


Give the profile a meaningful name.

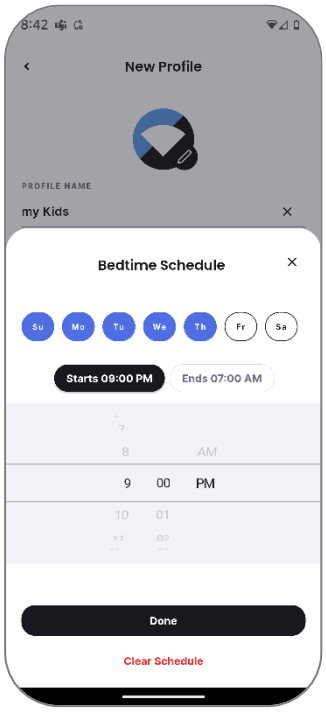
Enable content filter and schedule.

Add devices to the profile.

Click the desired category for content filtering. Consult the FAQ for a brief description.



Select days and start/stop times for scheduled Wi-Fi access.



RV22 Wi-Fi 6 Home Mesh Router

Licensing

The RV22 Wi-Fi 6 Home Mesh Router requires a device subscription. For additional flexibility, the RV22 device subscription can be added either to a cnMaestro Essentials account where other devices may be managed without a subscription or a cnMaestro account where other devices are managed with a cnMaestro X subscription.

cnMaestro Essentials

Service providers that manage a network using cnMaestro Essentials can add the RV22 to the account along with the device subscription. They will not need to add subscriptions to all the other devices in the account.

- Offered at no cost to service providers
- Scales up to 10,000 managed devices, while offering a single pane-of-glass management view of the entire network
- Includes remote diagnostics, automatic RF management, zero-touch network service provisioning—all in a secure end-to-end managed broadband network

RV22 Device Subscription Includes

- Claim the RV22
- Manage the AP with AP groups and device override
- Subscriber workflow
- Response Center* help desk and analytics
- Case management
- Automatic RF management
- Frequency coordination with FWA
- Automatic mesh
- Tech dump files, client connection statistics, client count, client SNR, AP and radio configuration monitor
- Topology view of FWA, Fiber, Wi-Fi
- Issue → Recommendation → Actions
- CAF2 compliant speed test (future)
- Subscriber App, web filter
- 10,000 devices, 7 days' data store

cnMaestro X

cnMaestro X is a paid subscription service that provides advanced features for enterprise APs, switches, and FWA products. All devices managed within an X account require a subscription.

- Includes Cambium Care Pro 24x7 technical support, L2 and L3 support engineers, and upgrades for advanced features

RV22 Device Subscription Includes

Includes all of the above, plus:

- RESTful API, webhooks, reports
- 24x7 customer support, L1–L3
- 20,000 devices, 1 year data store

*Planned release: June 2024

RV22 Wi-Fi 6 Home Mesh Router

Standards

802.11ax, up to 3x3:2. 20/40/80/160 MHz, 802.11a/b/g/n/ac wave 2, MU-OFDMA, MU-MIMO, TWT, MIMO, VHT MCS rates, 16/64/256/1024/4096-QAM, Transmit Beam steering, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM. IEEE 802.11d/e/h/i/k/r/u/v/w

Access Point Specifications

FCC	Ch 1–11, 36–64, 100–144, 149–165
ISED	Ch 1–11, 36–64, 100–116, 149–165
ETSI	Ch 1–13, 36–64, 100–140, 149-165
ROW*	Ch 1–14, 36–64, 100–144, 149–173 **Individual country limits may apply*
Radios	5 GHz: 802.11a/n/ac/ax, 3x3:2 2.4 GHz: 802.11 b/g/n/ax, 2x2:2
MAX PHY Rate	5 GHz radio: 2.4 Gbps 2.4 GHz radio: 600 Mbps
Ports	4 x IEEE 10/100/1000 Mbps Ethernet

Antenna Type	Internal, vertically polarized
Antenna Gain	5 GHz: up to 5 dBi 2.4 GHz: up to 5 dBi
Conducted Tx Power	5 GHz 3x3:2 radio: 25.7 dBm 2.4 GHz 2x2:2 radio: 24 dBm
Power	12VDC, 1.2A DC power jack 2.5mm x 5.5mm CP
Physical Environmental	100mm x 100mm x 175mm, 400g Multicolor status LED 0C - +40C ambient op temp 0C - +70C storage temperature 10% to 90% RH non-condensing
Certifications	FCC,CE, AU, NZ,UK

WLAN & Network Specifications

Licensing	Requires RV22 device subscription for use in a cnMaestro Essentials or cnMaestro X account
WLAN Security	64 clients, 2 SSIDs Open, WPA2 PSK, 802.11w PMF
Mesh	Automatic discovery and setup. Continuous mesh quality monitor with LED indicator.
Mesh Modes	Mesh star, mesh linear, or wired mesh. Not compatible with Cambium enterprise Wi-Fi APs.
RF Management	Auto-RF with auto-channel selection and frequency coordination with FWA subscriber module. RF monitor with CHN utilization/noise/RF interference/errors.
Network	NAT logging firewall/router, DHCP/DNS server
Band Steering	Yes
Subscriber QoS	WMM
Fast Roaming	802.11r

Router-to-Internet Speed Test	Automatically runs after the subscriber tests App-to-internet speed. Manual test can be initiated in the Response Center.* Scheduled tests configured in the Subscriber workflow.
CAF2-Compliant Speed Test	Subscriber random selection, tests, and report for CAF2-compliant network tests (not available at first release).
App-to-Internet Speed Test	Initiated from the dashboard tool on the Subscriber App. Test history is shown in the App and detailed data reported in Response Center.*
Subscriber App Tools	Web content filter Family time Speed test Optimize Wi-Fi Guest Wi-Fi Manage multiple sites Invite family members to manage Dashboard view of network, devices, security events
DNS Filter	Auto, manual, and proxy (default mode). DOH will be blocked; DNS over UDP will be used.

*Planned release: June 2024

RV22 Wi-Fi 6 Home Mesh Router

Ordering Information

Regulatory Model	RV22
RV22XXA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. no P/S, no line cord. ROW
RV22USA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, US Type B P/S. ROW
RV22USA00-CA	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, US Type B P/S. CA
RV22USA00-US	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, US Type B P/S. US
RV22USAB2-US	RV22 qty 2, Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, US Type B P/S. US two pack
RV22EUA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, EU Type C P/S. ROW
RV22EUA00-EU	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, EU Type C P/S. EU
RV22ANA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, AU Type I P/S. AU/NZ
RV22ARA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, AR Type I P/S. AR
RV22INA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, IN Type D P/S. ROW
RV22NTA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, NT Type N P/S. ROW
RV22UKA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, UK Type G P/S. UK/ROW
RV22ZAA00-RW	RV22 Wi-Fi 6 Home MESH Router/ Node, 5 GHz 3x3:2, 2.4 GHz 2x2:2 dual band, 4 x GbE. 12V1.5A, ZA Type M P/S. ROW
AX-12VDC1.5A-A	12VDC 1.5A PS wall Plug with US type A
AX-12VDC1.5A-G	12VDC 1.5A PS wall Plug with UK type G
AX-12VDC1.5A-C	12VDC 1.5A PS wall Plug with EU type C
AX-12VDC1.5A-D	12VDC 1.5A PS wall Plug with India type D
AX-12VDC1.5A-I	12VDC 1.5A PS wall Plug with Australia/New Zealand Type I

cnMaestro Device Suscription

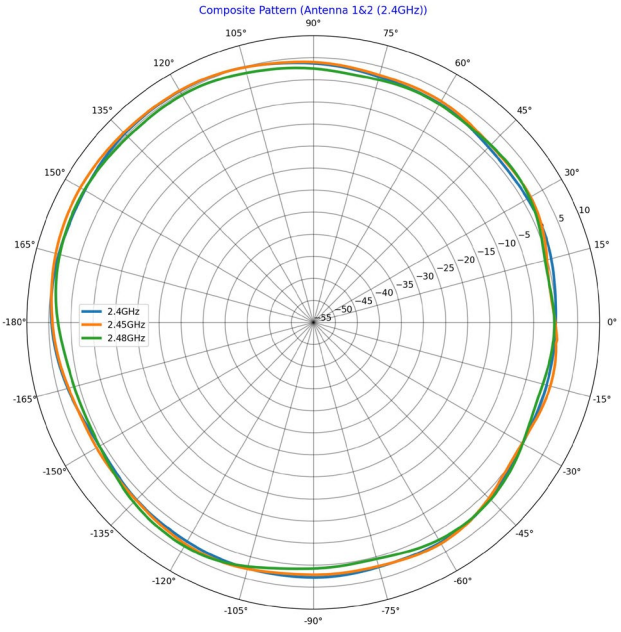
RV-SUB-22-1	cnMaestro Device Subscription for RV22. cnMaestro NMS, Subscriber App, Response Center, Speed test, 7x24 support. Apply to cnMaestro Essentials account or cnMaestro X account. One device for one (1) year
RV-SUB-22-3	cnMaestro Device Subscription for RV22. cnMaestro NMS, Subscriber App, Response Center, Speed test, 7x24 support. Apply to cnMaestro Essentials account or cnMaestro X account. One device for three (3) year
RV-SUB-22-5	cnMaestro Device Subscription for RV22. cnMaestro NMS, Subscriber App, Response Center, Speed test, 7x24 support. Apply to cnMaestro Essentials account or cnMaestro X account. One device for five (5) year

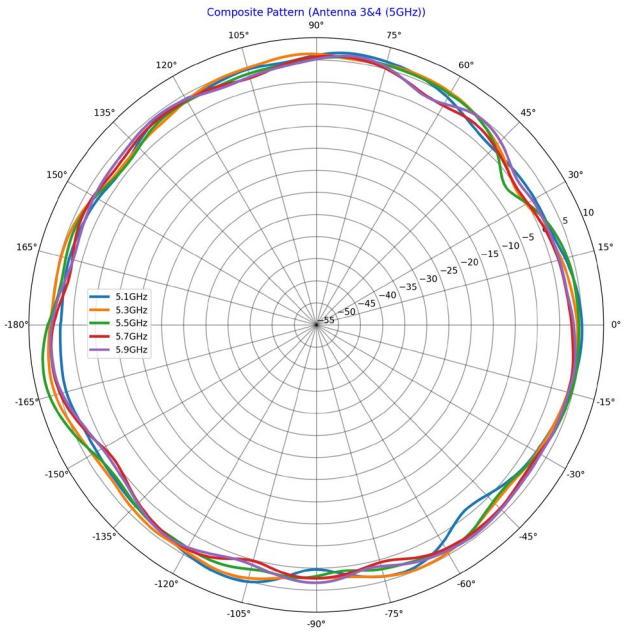
Hardware Warranty

Cambium Networks RV22 includes a one-year hardware warranty from time of sale.

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RV22 Wi-Fi 6 Home Mesh Router









100mm x 100mm x 175mm



ABOUT CAMBIUM NETWORKS

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

cambiumnetworks.com

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