

 **GigaSpire®**
7u10t



The GigaSpire 7u10t (GS5239E) delivers four times the performance of current Wi-Fi 6 systems, setting the new standard for all Calix SmartLife™ managed solutions. Equipped with Wi-Fi 7 functionality, broadband service providers now have the ideal Wi-Fi system to complement 10G fiber delivery systems to solve the high-speed requirements of gaming systems, the low latency need for applications equipped with augmented/virtual reality functionality, the expanded use of 4K/8K streaming devices and the growing number of connected intelligent devices per subscriber.

KEY ATTRIBUTES

Home Gateway

- Layer 2 bridge and Layer 3 routing for High-Speed Internet (HSI) data and IPTV video services
- DHCP server options
- DHCP (IPoE) and PPPoE network connections
- Network Access Translation (NAT), public to private IP addressing
- Configurable IP address schemes, subnets, static-IP addresses
- DNS server
- Bridge port assignment and data traffic mappings
- Port forwarding
- Firewall and security
- Application and website filtering
- Selectable forwarding and blocking policies
- DMZ hosting
- Parental controls, time of day usage
- Denial of service (DoS) protection
- Time/Zone support
- Universal Plug-and-Play (UPnP)

Wi-Fi

- 2.4 GHz, 5 GHz, and 6 GHz simultaneous tri-band
- 5 GHz 802.11be (Wi-Fi 7) certified, 802.11a/b/g/n/ac/ax compatible
- 6 GHz (Wi-Fi 7), 802.11be compatible
- 2x2 @ 2.4 GHz, 4x4 @ 5 GHz and 4x4 6 GHz
- 2.4 GHz 802.11ax certified, 802.11b/g/ac compatible
- WPA/WPA2/WPA3
- PuF (Physical Unclonable Functions)

- WPS push-button
- 4x4 DL/UL MU-MIMO, implicit/explicit high-power, dynamic beamforming
- 4096 QAM; OFDMA; BSS Coloring
- MLO (Multi-Link Operation)
- 320MHz support @ 6GHz
- DCM (Dual Carrier Modulation)
- TWT (Target Wake Time) for IoT clients

Wi-Fi Redundant mesh

- Self-Managed: self-configuration, Airtime fairness
- Dynamic Mesh: load balancing, band/node steering; interference management
- Self-Healing: backhaul failover; diagnostics; events

Voice

- General: SIP, H.248 (aka Megaco) and MGCP
- RENs per unit: 10 maximum
- Drop length: Maximum 1000 feet (305 m) using 26 AWG wire
- DS0 Output: 25 mA
- Ring Voltage: 56–84 VAC

Supports multiple data service profiles

Traffic Management and Quality of service (QoS)

- 802.1Q VLANs
- 802.1p service prioritization
- Q-in-Q tagging
- Multiple VLANs
- DiffServ
- Pre-defined QoS on service type
- MAP-T

IPTV, IGMP

- IGMPv1, IGMPv2, IGMPv3 support
- IGMP Snooping and Proxy
- IGMP Fast Leaves

Gateway Management

- Calix Service Cloud
- TR-069
- Local GUI access for provisioning

Ookla-based Performance Testing

- Subscribers can run an Ookla-based performance test from within the Calix CommandIQ® mobile app
- Symmetrical speed test results of 10 Gbps are possible with the GigaSpire system.

SPECIFICATIONS

Dimensions

- Depth: 8.7 in (220mm)
- Height: 11.6 in (295mm) without stand; 12.1 in (308mm) with stand
- Width: 2.5 in (63mm) without stand; 4.1 in (105mm) with stand
- Weight: 3.3 lbs. (1.51kg)

Interfaces

- WAN: 10 Gigabit Ethernet
- LAN: One (1) 10 Gigabit Ethernet; Four (4) 100/1000/2500 BASE-T Ethernet ports, RJ 45 connectors
- Voice: Two (2) ports
- USB: USB 2.0 Type A
- WPS: WPS Push-button actuator
- Reset button for factory default
- Single pin and 8-pin UPS

Data

- Drop length: 328 feet (100 m) maximum using CAT5/6 cable for 2.5 GigE
- Drop length: 100 feet (30 m) maximum using CAT6A and 7 cable for 10 GigE

Wireless

- 2.4 GHz 2x2, 5 GHz 4x4 and 4x4 6 GHz internal antennas

- 2.4 GHz 802.11 b/g/n/ax
- 2x2 UL/DL MU-MIMO
- 5 GHz 802.11 a/n/ac/ax/be
- 4x4 UL/DL MU-MIMO, explicit high-power, dynamic beamforming
- 6 GHz 802.11be 4x4
- 2.4 GHz, 5 GHz, and 6 GHz simultaneous
- DCM, TWT, extended GI
- Auto channel selecting and interference detection
- Wi-Fi multimedia (WMM)
- 802.11k, 802.11v,
- Supports up to 500 wireless clients

Remote Management

- TR-069 remote management
- TR-098 Internet Gateway Device Data Model

Environmental

- Operating temperature: Indoor ambient temperature, 0° to 0°C (32° to 104° F)
- Operating and storage relative humidity: 10 to 90 % and 5 to 95% non-condensing respectively

Certification and Compliance

- Emissions: FCC Part 15 Class B, IC ICES-003 Class B, CISPR-22
- Safety: UL 62368 and UL 1697 approved
- IEEE: 802.3, 802.3AB, 802.3U, 802.1p, 802.1Q
- USB-IF Compliance USB 2.0
- Wi-Fi Alliance Certified 802.11be (Wi-Fi 7)



Powering and Alarms

- Input voltage: 12 V DC (nominal)
- External Power Adapter: 12 V DC, 3A