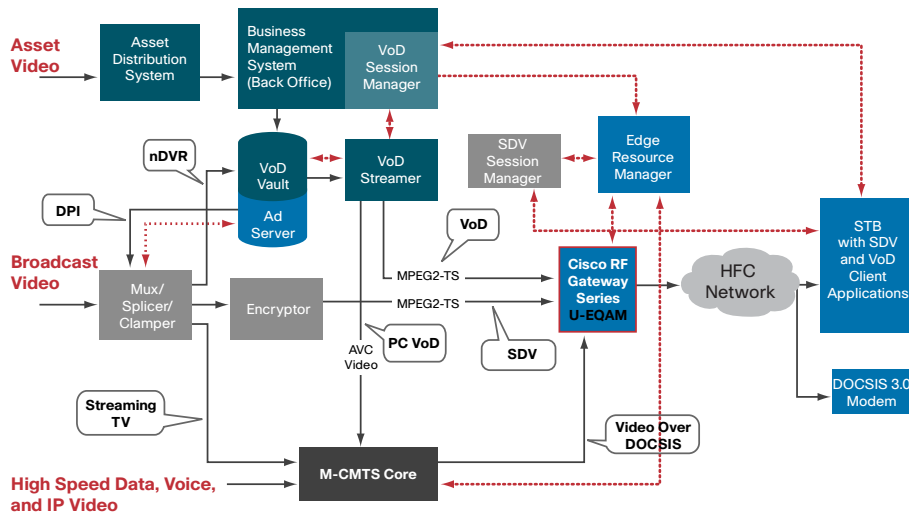


The Cisco® RF Gateway Series introduces standards-based universal edge QAM (U-EQAM) solutions for the convergence of high-speed and high-bandwidth data and video distribution at the edge of the cable access network. The Cisco RF Gateway Series is a powerful enabler of end-to-end triple-play services.

The RF Gateway 1 (Model number: RFGW-1-D) is a compact 1 RU U-EQAM with a 48 QAM capacity. Together with the Cisco uBR family of Cable Modem Termination Systems (CMTSs), Universal Session and Resource Manager (USRM) and Digital Content Manager (DCM), the Cisco RF Gateway Series provides a comprehensive, standards-based solution for video or data service deployments requiring high density and maximum reliability. The RF Gateway Series U-EQAM also enables service convergence and QAM sharing between Video on Demand (VoD), Switched Digital Video (SDV) and Data Over Cable Service Interface Specifications (DOCSIS) services by providing a highly scalable and redundant EQAM design.

Figure 1 Cisco RF Gateway Series U-EQAM Solutions for SDV, VoD, M-CMTS, DOCSIS 3.0 and Video over DOCSIS (VDOC)



Primary Benefits

- Scalable:** Highly scalable to accommodate exponential growth in traffic at the network edge, projected to increase by 10 times over the next 5 years
- Convergence:** Serves as a convergence point in a multi-service network supporting the Modular CMTS (M-CMTS), DOCSIS® 3.0, and video applications such as SDV, VoD, and VDOC.
- Efficiency:** Complements the Cisco Universal Session and Resource Manager (USRM) for dynamic QAM sharing to maximize bandwidth efficiency across services
- Economics:** Reduces capital expenditures (CapEx) through service convergence enabled by U-EQAM (with only one platform to procure and manage)
- Investment protection:** Provides evolutionary roadmap to protect cable operator's investment

Cisco RF Gateway 1

As the first release in the Cisco RF Gateway Series of U-EQAM products, the Cisco RF Gateway 1 introduces a fourth-generation, standards-based U-EQAM device for expansion of VoD, SDV, and high-speed data services.

Figure 2 Cisco RF Gateway 1



The Cisco RF Gateway 1 is a highly dense, highly available and low-cost U-EQAM device, designed from the start to provide sufficient capacity to create a converged highly available Access/Edge.

Key features of the Cisco RF Gateway 1 include:

- Industry-leading scalability for a total stream processing capacity of 2048 streams per chassis
- Fully redundant Gigabit Ethernet (GE) input ports (4 total for 2:2 redundancy) and redundant powering in just 1 RU



Cisco RF Gateway 1 Universal Edge QAM Solution

- Front-to-back airflow meets cable operator requirements and allows multiple RF Gateway 1 devices to be stacked.
- True U-EQAM for support of a multitude of applications: video (broadcast, SDV, SD/HD, MPEG-2, AVC) and IP (M-CMTS/DTI, DOCSIS 3.0)
- Fully frequency agile from 45–1000 MHz
- RF performance exceeds the latest CableLabs® DRFI specifications
- Designed as a green EQAM with low power consumption
- Increased solution resiliency and reliability due to full integration with both the Cisco video and data converged architectures
- High QAM capacity enables highly efficient QAM sharing in a converged MPEG and IP environment
- High availability and control plane redundancy with the Cisco USRM
- Compliancy with ITU-T J.83 standard, Annex A (DVB), Annex B(ATSC), or Annex C (Japan)
- Internet Group Management Protocol Version 3 (IGMPv3) support
- Designed for pre-encryption or integrated encryption support
- Hot-swappable and auto-configurable QAM cards

Customer Benefits

The Cisco RF Gateway Series U-EQAM is ideal for cable operators who want to do the following:

- Achieve rapid time-to-market of new QAM-based services to generate incremental revenue
- Enable service and network convergence with end-to-end high availability
- Increase service velocity and more quickly offer new services on open and converged platform
- Invest cost-efficiently in a U-EQAM solution with maximum scalability and modularity QAM device sharing between video and data, and forward compatibility(1GHz-ready, DOCSIS 3.0, M-CMTS, SDV, and HD)
- Incrementally grow digital video and DOCSIS networks to meet subscriber demand for new services while optimizing capital expenditures
- Targeted deployment of the RFGW-1-D for M-CMTS and DOCSIS 3.0 network deployments
- Deploy a product and solution with superior quality and reliability, enabled by Cisco's proven engineering leadership

- Incorporated into the Cisco end-to-end solution network architecture—offering a fully tested and integrated design to help cable operators quickly and efficiently deploy new services

Why Cisco?

Cisco has a comprehensive portfolio of world-class products for IP Next-Generation Network (IP NGN) data and video solutions. Products range from core routing equipment to QAM devices to customer premises equipment (CPE). The Cisco RF Gateway Series combines the best of Cisco's leadership in data and video delivery technology. With this end-to-end winning Cisco architecture, cable operators can deploy a robust and dependable U-EQAM solution that enables a converged next-generation cable access network.