

Evertz and Quintech: End-to-End Satellite Ground System Solutions

Evertz and Quintech deliver a complete, end-to-end solution for modern satellite ground systems — from Simulsat® multibeam antennas to indoor and outdoor RF over fiber, RF distribution, and scalable RF matrices designed for small, medium, and large facilities. Our portfolio extends to advanced satellite demodulation, RF signal reception, monitoring, and spectrum analysis, ensuring superior performance and reliability across the entire signal chain.

RF Over IP

For digital IF applications, Evertz and Quintech provide a fully integrated Software Defined Networked RF (SDN-RF) solution. Combining IFC digitizers, digital combiners/dividers, high-bandwidth IP switching, and a unified orchestration and monitoring platform, SDNRF enables seamless management of both analog RF and digital IP workflows—all within a single pane of glass. Our SDN-RF solution is built around the Digital IF Interoperability (DIFI) Consortium industry standards and specifications.

By transporting digitized IF over IP networks, including WANs, our solution eliminates traditional distance limitations, enhances spectrum efficiency, and enables the strategic placement of satellite dish farms.

Applications

Satellite Ground Systems

- Digital IF Transport
- Remote Dish Farms
- Virtualized Uplinks/Downlinks

Telecom and 5G Infrastructure

- Fronthaul/Backhaul Transport
- Network Virtualization
- Testing and Verification

Broadcast and Media Contribution

- IP-Based Distribution
- Centralized Operations
- Scalable Monitoring

Research, Aerospace, and Scientific Applications

- Radio Astronomy and Deep Space Networks
- Spectrum Research
- Simulation and Playback

Government, Defense, and Intelligence

- Secure Signal Transport
- Spectrum Awareness & Monitoring
- Remote Command and Control



Ordering and Product Information:

Simulsat

Simulsat Multibeam antenna

Outdoor RF over IP: S-ODU-ADC2DAC2-N50-M

Dual bi-directional channel analog to digital IF converter module with 2x QSFP ports. Expandable up to Quad bi-directional channels using software keys (sold separately). Solely for use inside Sentry Quintech products.

S-ODU-ADC8-N50-4

Quad uni-directional channel analog to digital IF converter module with 2x QSFP ports. Expandable up to eight uni-directional channels using software keys (sold separately). Solely for use inside Sentry Quintech products

S-ODU-DAC8-N50-4

Quad uni-directional channel digital to analog IF converter module with 2x QSFP ports. Expandable up to eight uni-directional channels using software keys (sold separately). Solely for use inside Sentry Quintech products.

S-ODU-RFIP-FK-1GHZ

Software license to enable up to 1GHz instantaneous bandwidth

Indoor RF over IP modules:

7880RFIP-ADC4

Single channel Analog RF to Digital IP converter with 4x RF Ports and 2x QSFP Ports (SFPs sold separately). Expandable up to quad channels using software keys (software keys sold separately).

7880RFIP-DAC4

Single channel Digital IP to Analog RF converter with 4x RF Ports and 2x QSFP Ports (SFPs sold separately). Expandable up to quad channels using software keys (software keys sold separately).

7880RFIP-ADC4DAC4-2-A

Single channel bi-directional Analog RF to Digital IP converter with 8x RF Ports and 2x QSFP Ports. Expandable up to Quad bi-directional channels using software keys (SFPs software keys sold separately)

7880RFIP-FK-1GHZ

Software license to enable up to 1GHz Instantaneous Bandwidth (IBW) on 7880RFIP family

Digital RF Processing (Channelizer and de-channelizer):

670WSP-HW

Next Generation High Density Media Processing FPGA Accelerated Hardware.

WSP-CK-4x8-CD

License to Combine up to 8 narrow band inputs into 4 wideband (up to 600MHz) outputs and simultaneously divide 4 wideband (up to 600MHz) inputs into up to 8 narrow band outputs.

WSP-CK-1x13-CD

License to Combine 13 narrow band inputs into 1 wideband (up to 600MHz) output and simultaneously divide 1 wideband (up to 600MHz) input into 13 narrow band outputs.

WSP-CK-1x26-C

License to Combine 26 narrow band inputs into 1 wideband (up to 600MHz) output.

WSP-CK-1x26-D

License to Divide 1 wideband (up to 600MHz) input into 26 narrow band outputs.

670WSP-FK-1GHZ

Software license to enable up to 1GHz instantaneous Bandwidth (IBW) on 670WSP-HW family. Software licenses sold separately.

NATX - High-Bandwidth IP Switch Fabric:

NATX-16-100G

IP Switching Fabric with Integrated Network Address Translation. Up to 16x100G or 64x25G.

NATX-32-100G-1

IP Switching Fabric with Integrated Network Address Translation. Up to 32x100G or 128x25G.

NATX-64-100G-2

IP Switching Fabric with Integrated Network Address Translation. Up to 64x100G or 256x25G.

System Orchestration, Control, Monitoring & Analytics:

MAGNUM-OS

Base software package for accessing, supporting and managing MAGNUM OS deployment.

MAGNUM-HW

1RU Enterprise Class Server for MAGNUM OS Control / Orchestration software modules.

MAGNUM-HW-NMS

1RU Enterprise Class Server for MAGNUM OS NMS software modules.



Sales: 1-877-995-3700

www.evertz.com

@Evertz @EvertzTV



END-TO-END SATCOM SOLUTIONS



SDN-RF





Simulsat is the world's only true full-arc multiple satellite antenna.

- Simultaneously receiving transmissions from over 35 satellites without the need for adjustment or any loss in performance between satellites.
- Fully 2° compliant
- Supports signal reception across C, Ku, S, Ka and Inclined Orbit bands within a wide 70–75° view arc
- Most versatile and efficient solution for multi-satellite reception

SENTRY

The **Sentry Outdoor** is a rugged, weatherproof RF-to-IP conversion solution.

- Rated IP67 for reliable performance in harsh outdoor environments
- Designed for downlink, uplink, or bidirectional applications
- Supports seamless conversion between analog RF and digital IP signals.

Available in three configurations to meet diverse deployment needs:

- 8-Channel Unidirectional RF-to-IP Converter
- 8-Channel Unidirectional IP-to-RF Converter
- 4-Channel Bidirectional RF-to-IP and IP-to-RF Converter

Modular

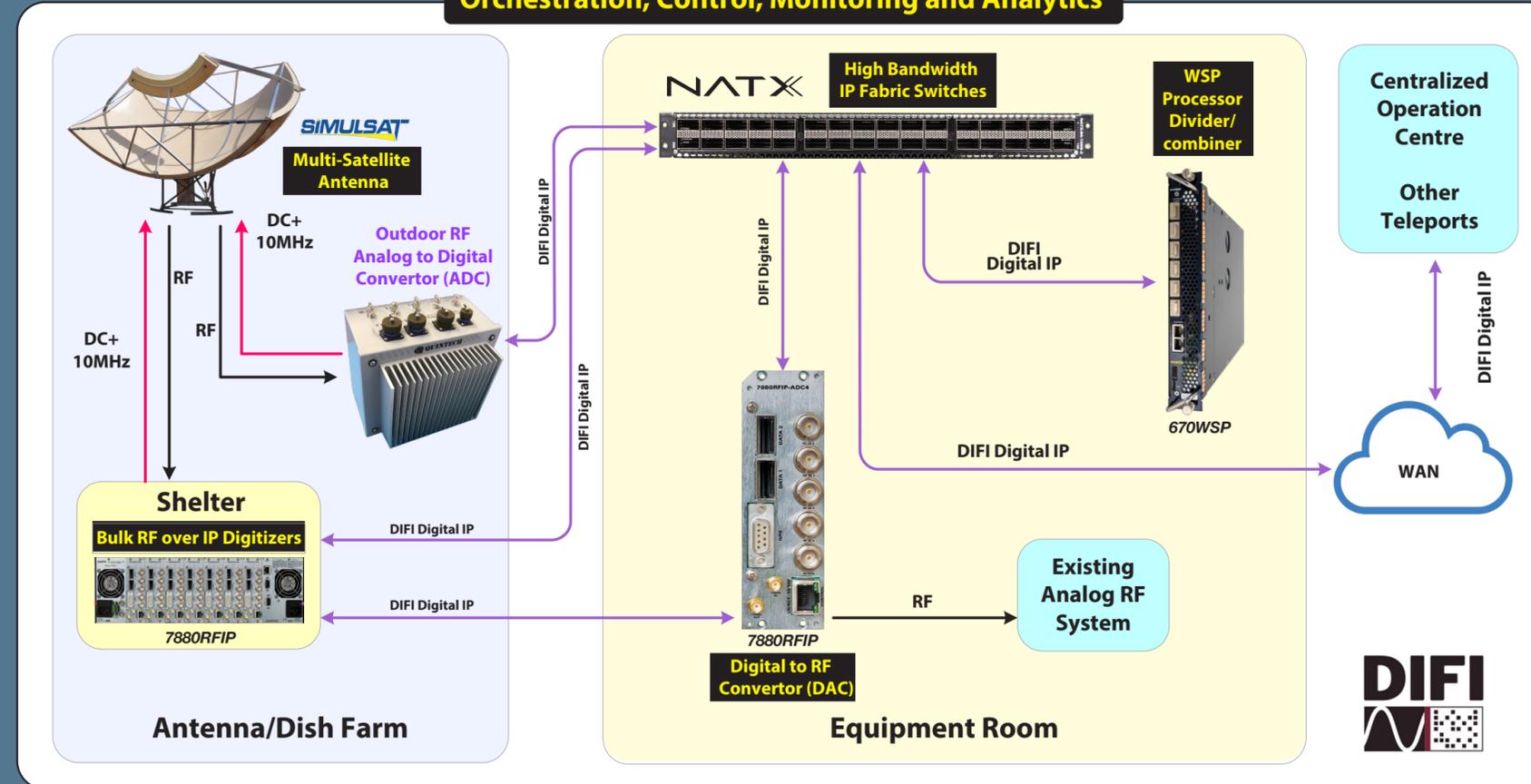
The **7880RFIP** platform is a modular, hot-swappable solution designed for high-density RF-to-IP conversion.

- Up to 28 unidirectional or bidirectional RF-to-IP conversions in a 3RU
- Up to 8 conversions in a compact 1RU chassis
- Delivers flexibility and scalability for modern RF infrastructures
- Provide advance health and status monitoring

SDN-RF

MAGNUM-OS

Orchestration, Control, Monitoring and Analytics



MAGNUM-OS System Orchestration, Control, Monitoring & Analytics

At the core of the Evertz/Quintech ecosystem is a full-stack software suite that unifies orchestration, control, monitoring, and analytics—offering a single-pane-of-glass experience for managing complex DIFI-based infrastructure.

MAGNUM-OS delivers comprehensive orchestration, abstracting system complexity from the operator while ensuring fault mitigation and real-time status reporting. Paired with VUE, users benefit from a customizable and intuitive interface that can manage small systems to global operations.

Key Capabilities:

- Design, configure, and manage IP systems—from small routers to enterprise-class networks with tens of thousands of sources and destinations
- End-to-end facility and signal monitoring
- Advanced analytics for system-wide insights—collecting, indexing, and analyzing operational data from every device in the network

This powerful software stack allows organizations to streamline operations, enhance efficiency, and reduce costs, all while maintaining high availability and visibility across their entire RF/IP infrastructure.

NATX

The **NATX** is a high-bandwidth and high performance, IP Switch Fabric, built on Evertz's award-winning Software Defined Video Network (SDVN) architecture.

Key Features:

- **Deterministic Routing:** Ensures simple, predictable, and high-performance switching of high-bandwidth DIFI signals within the SDN fabric
- **Robust 10/25/100/200GbE Infrastructure:** Route DIFI signals with unmatched scalability, reliability, and security
- **Flexible Configurations:** Available in 16, 32, and 64-port 100GbE models, supporting up to 260 ports for extensive scalability across applications

NATX is the backbone of SDN-RF networks—empowering seamless, secure, and future ready signal transport.

Digital RF Processing

The **670WSP Wideband Signal Processor** series offers a high-density, modular solution for advanced digital IF signal processing.

- Enables channelizing (splitting) wideband RF signals into narrowband transponders
- Enables de-channelizing (combining) narrowband signals into wideband outputs
- Flexible signal manipulation, enabling highly efficient and customizable digital IF workflows using IP networks.

Overall Digital RF Features:

- Modular, high density solution in 1RU or 3RU frames
- 950-2150MHz Range
- 1- 600MHz Real-time Bandwidth/Channel (Selectable) with software License for 1GHz Support wideband input
- Support both Narrowband (e.g. one or few transponders) and Wideband Applications (e.g. Full polarity)
- Agnostic to signal types or modulation format
- 4-16 bit Sample Size (User control)
- 10/25/100 GBE Throughput (QSFP Trunk Ports)
- Manual and automatic gain control
- Compliant with IEEE-ISTO 4900-2021 (DIFI)/Vita 49.2 standards
- Scalable architecture accommodates multiple WSPs in a 3RU or 6RU chassis