

XRF6

32x64, 64x64 RF Router Expandable to 512x512



The XRF6 is a modular RF signal matrix for routing and monitoring L-band, IF and other signals within a satellite communications facility. Built on a modular architecture, all active components are hot-swappable and front-loading, ensuring ease of maintenance and matrix expansion. Advanced features such as automatic gain control, salvo operations, monitoring, and alarm reporting of critical signal parameters such as input signal presence and signal level provide flexible RF signal management. Optional 18VDC LNB power is also available with active overload and short circuit protection.

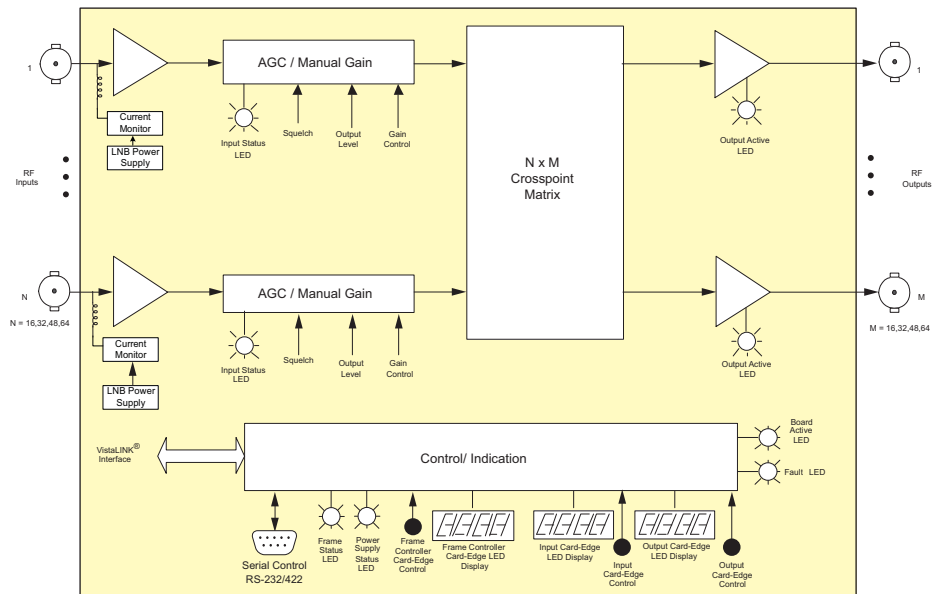
The XRF6 is offered with the X-NCP2 and CP-22xxxE series remote control panel options for crosspoint control and system configuration. Additionally, this flexible routing matrix can be controlled, configured, and monitored via serial control and/or SNMP control over Ethernet, using Evertz® VistaLINK® or other monitoring and control software.

The XRF6L houses up to a 64x64 routing matrix within a 6RU chassis. Matrix sizes are scalable in increments of 16x inputs and outputs. External expansion to 512x512 is available with the addition of multiple frames and Evertz® SRF series passive splitters/combiners. Input cards and output cards can be added independently for non-square matrix sizes. High reliability is ensured by low component count per signal path, optional dual power supplies, and redundant system controllers.



Features & Benefits

- Future proof with 40–2450MHz operation
- Industry's best overall signal performance, preserving signal quality from input to output. Supports the strict performance requirements of advanced modulation formats needed for optimal transponder usage and ROI over time
- 70/140MHz IF, L-Band, stacked L-Band and off-air DTV all in one platform
- Passes all modulation formats
- Modular design; all cards are front-loading and hot-swappable
- Passcode protection for configuration parameters and destination locks
- Up to 8x programmable salvos
- External system expansion capability up to 512x512
- Redundant power supply and frame controller options
- Non-blocking, fan-out configuration
- Optional 18VDC LNB power with active overload and short circuit protection
- Solid State matrix switching system reduces complexity, improves reliability and increases flexibility over manual patch bays
- Automatic or manual gain control on all input channels
- RF power monitoring on all input channels
- Adjustable output level in AGC mode
- Matrix crosspoint control using CP-22xx series or X-NCP2 remote control panels, VistaLINK®, or third party control software
- System configuration, alarm monitoring, event logging, and e-mail notification available through VistaLINK® or third party control software



The Complete Solution Provider





► Specifications

<p>System: Matrix Sizes: 16x16 to 64x64 in a 6RU frame 512x512 maximum expanded system size</p> <p>System Expansion: Inputs or outputs are expandable in increments of 16 Expansion beyond 64x64 requires additional frames and external splitting/combining</p> <p>Impedance: 75Ω (50Ω optional)</p> <p>Connector Type: BNC per IEC 61169-8 Annex A (SMA, F-type optional)</p> <p>Gain Range (manual gain mode): -6 to +20dB in 1dB steps</p> <p>Output AGC level: -20 to -50dBm</p> <p>Bandwidth: 40-2450MHz</p> <p>RF Specifications — L-Band (850 to 2450MHz*): Freq Response: ±1.5dB over the passband, ±0.5dB over any 36 MHz channel</p> <p>Isolation: > 60dB input to output > 70dB output to output and input to input</p> <p>RF Input Power: -10 to -70dBm</p> <p>Max RF Output Power: -10dBm</p> <p>Input P1dB: +2dBm (1500MHz) typ</p> <p>OIP3: +12dBm (1500MHz) typ</p> <p>Noise Figure: 6dB (1500MHz, Gain = +20dB) typ 20dB (1500MHz, Gain = 0dB) typ</p> <p>Return Loss: > 15dB (input and output)</p>	<p>RF Specifications — IF (40 to 200MHz*): Frequency Response: ± 0.5dB over 50-90MHz and 120-60MHz</p> <p>Isolation: > 60dB input to output > 70dB output to output and input to input</p> <p>RF Input Power: -15 to -70dBm</p> <p>Max RF Output Power: -10dBm</p> <p>Input P1dB: -4dBm (70MHz) typ</p> <p>OIP3: +10dBm (70MHz) typ</p> <p>Return Loss: > 13dB (input), > 15dB (output)</p> <p>LNB Power: Voltage: 18VDC, off (selectable) Current: 400mA Protection: Short circuit, overload</p> <p>Communication & Control: Serial: RS-232/RS-422 selectable — Female 9-pin D connector SNMP over IEEE 802.3/U (10/100 BaseTx) RJ-45 connector X-NCP2, CP-2232E or CP-2116E Control Panels: VistaLINK®, MAGNUM or third party SNMP or serial interface</p> <p>Ethernet: SNMP over IEEE 802.3/U (10/100 BaseTx) RJ-45 connector</p> <p>Control: X-NCP2, CP-2232E or CP-2116E Control Panels: VistaLINK®, MAGNUM or third party SNMP or serial interface</p>	<p>Electrical: AC Input: Auto-ranging, 100 to 240V AC, 50/60Hz</p> <p>Max Power: Consumption: 350W (Fully loaded frame) Connector: IEC 60320 — 1 per power supply Compliance: CSA Listed to CSA C22.2 No. 60065-03, UL 60065-03 IEC 60065-(2001-12) 7th Edition Safety: Complies with CE Low voltage directive EMC: Complies with FCC part 15, Class A Complies with EU EMC directive</p> <p>Physical: Dimensions: 10.5"H x 19"W x 20.5"D (266mm H x 483mm W x 520mm D) Module Capacity: 4x input slots, 4x output slots Weight: Approx. 17.4lbs (7.9kg) with 2 power supplies, no slots occupied Approx. 32lbs (14.5kg) with 2 power supplies all slots occupied</p>
--	---	--

* All specifications over specified bandwidth unless noted

► Ordering Information

PKGXRFL-16x16-A	16x16 RF Routing System with inter frame expansion up to 64x64
PKGXRFS-16x16-A	16x16 RF Routing System with inter frame expansion up to 32x64

Ordering Options

XRF6-PS	Redundant power supply
X-NCP2	Router control panel
XRF6S-FC	Redundant frame controller for XRF6S
XRF6L-FC	Redundant frame controller for XRF6L

Contact Evertz® sales for other matrix sizes up to 512x512, as well as 50Ω BNC, SMA and F-Type connector options