

SCORPION-4

Media Processing Platform — Standalone Frame

The SCORPION-4 Media Processing Platform is a standalone, compact form factor, multi-service signal conversion, aggregation gateway capable of simultaneously transporting video, audio and data services over Ethernet and fiber networks. Using SCORPION Mini I/O Modules, the SCORPION-4 is highly flexible and can accommodate a multitude of signals including 4K SDI, Ethernet, MADI, AES, HDMI, intercom and serial data. The SCORPION-4 features encapsulation and de-encapsulation to IP over dual 10GbE or 25GbE trunk ports.

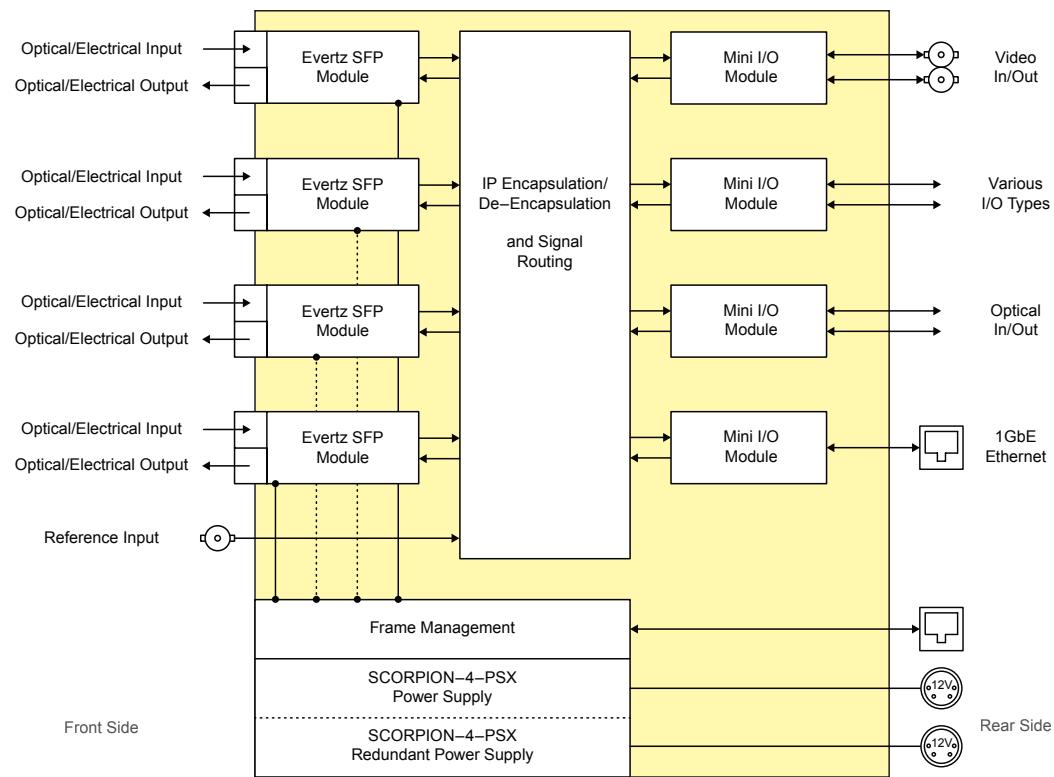
When combined with other compatible IP gateways including the 1RU SCORPION-X18, the SCORPION-4 becomes part of an integrated, scalable transport network, enabling the sharing of content from different sites using different transport media.

The SCORPION-4 possesses a small fanless form factor, and is designed to be operated in portable and/or low noise environments. SCORPION-4 is ideal for mobile and live sports production applications.



► Features & Benefits

- High density and fully modular in a standalone form factor
- All-in-one platform to handle video, audio, data transport needs
- IP encapsulation/de-encapsulation supporting SMPTE ST 2022-6 and SMPTE ST 2110
- 10/25GbE IP network support
- Up to 4x single-slot or 2x dual-slot mini I/O modules fit the standalone frame
- Up to 4x SFP ports for Ethernet or fiber IP connectivity
- Supports MSA SFP transceivers
- Diverse signal types such as 12G/6G/3G/HD/ASI, Ethernet, serial data, HDMI, USB and Intercom (mini I/O module-dependent)
- Main and redundant power supplies
- Onboard signal integrity and link analysis
- Multiple control options including SNMP, web access, panels and MAGNUM
- Fanless operation with integrated heat sink for power dissipation



► Specifications

System		Electrical Inputs/Outputs		Electrical	
Density:	4x SFP's 4x SCORPION mini I/O modules	Connector:	Dependant on SCORPION mini I/O module (see appropriate specifications)	Power Supply Configuration:	Dual external supplies (primary/secondary) DC input 12V DC (external power supplies require 110–220V AC, 50/60Hz)
Impedance:	Dependant on SCORPION mini I/O module (see appropriate specifications)	Impedance:	Dependant on SCORPION mini I/O module (see appropriate specifications)	Voltage:	25W empty, 132W fully loaded Connectors: 12V DC, auto-ranging 100–240V AC 50/60Hz adapter included
Connector:	Dependant on SCORPION mini I/O module (see appropriate specifications)	Reference	Number of Inputs: 1 Connector: BNC IEC 61169.8 Annex A Reference Inputs: Analog 625 or 525, Tri-Level HD Impedance: 75Ω	Status Indicators:	LED on unit
Communication and Control		Physical	Dimensions: 2.5" H x 8.5" W x 6" D Module Capacity: 4x Evertz SFP modules, 4x SCORPION mini I/O modules Operating Temp.: 0–50 °C	Compliance	Safety: CSA listed, complies with EU Safety Directive EMC: Complies with FCC part 15, Class A Complies with EU EMC Directives
Ethernet:	SNMP over IEEE 802.3/U (10/100/1000 BaseTx) RJ-45 connector				
Control:	SNMP, web access, direct control and control panels				

► Ordering Information

SCORPION-4 Media Processing Platform — Standalone Frame

Ordering Options:

- SCORPION-4-PSX** External power supply for SCORPION-4
- SCORPION-4-RP1** Single SCORPION-4 19" rack mount kit (2RU)
- SCORPION-4-RP2** Dual SCORPION-4 19" rack mount kit (2RU)

► Available Mini I/O Modules * See SCORPION Mini I/O Modules specification document for more details.

MIO-VB-2-12G	12G/6G/3G/HD/SD/ASI video access module	MIO-USB-B	USB-B HID interface
MIO-GE-RJ45-IP	1GbE Ethernet access module with onboard processing	MIO-HDMI-IN-3G	HDMI input access module
MIO-AES-IP	Dual AES67 encapsulator and de-encapsulator	MIO-HDMI-OUT-3G	HDMI output access module
MIO-AES-IN4-IP	Quad AES67 encapsulator	MIO-HDMI-IN-4K	4K SDI or HDMI input module, dual slot
MIO-AES-OUT4-IP	Quad AES67 de-encapsulator	MIO-HDMI-OUT-4K	4K SDI or HDMI output module, dual slot
MIO-AES-D4	AES audio de-embedder module	MIO-HDMI-IN1-4K-IP	
MIO-MADI-2-IP	Single MADI encapsulator and de-encapsulator	MIO-HDMI-OUT1-4K-IP	HDMI input module with onboard processing, dual slot
MIO-DANTE-64	Dante® to TDM bridge module		HDMI output module with onboard processing, dual slot
MIO-IT-IP	Intercom transceiver module (2x analog audio in/out, 2x serial data, 4x GPIO), dual slot	MIO-HDMI-2-4K-IP	HDMI microservice module
MIO-AVT	Analog video/Black Burst transmit module with loop out	MIO-BLADE-Z21	Microservice module
MIO-AVR	Analog video/Black Burst receive module	MIO-DE4-3G	3G/HD/SD-SDI SCTE/data/LTC/GPI embedding module
MIO-USB-A	USB-A HID interface	MIO-DD4-3G	3G/HD/SD-SDI SCTE/data/LTC/GPI de-embedding module

► Recommended QSFP/SFP Modules * See SCORPION Compatible SFPs specification document for more details.

SF PTR-13	SFP optical non-reclocked transceiver, 3Gb/s, 1310nm, SMF	SFP3Txx/yy-2	SFP dual optical non-reclocked transmitter, 3Gb/s, CWDM, SMF
SF PTR-13-R	SFP optical reclocked transceiver, 3Gb/s, 1310nm, SMF	SFP3R-2	SFP dual optical non-reclocked receiver, 3Gb/s, standard sensitivity, SMF
SFP3TR-13-12G	SFP optical reclocked transceiver, 12Gb/s, 1310nm, SMF	SF PTR-RJ45-SGM-AV	
SFP12G-T13-2	SFP optical reclocked dual transmitter, 12Gb/s, 1310nm, SMF	SFP25G-TR13	Single 10/100/1Gbps RJ-45 SFP module
SFP12G-R-2	SFP optical reclocked dual receiver, 12Gb/s, 1310nm, SMF	SFP10G-TR13-A	SFP, 25Gb/s, SMF
SF PTR-M-HDBNC-R	SFP electrical reclocked transceiver, 12Gb/s, HD-BNC		SFP, 10Gb/s, SMF
SFP3T13-2	SFP dual optical non-reclocked transmitter, 3Gb/s, 1310nm, SMF		
SFP3T13-2-S	SFP dual optical non-reclocked transmitter, 3Gb/s, short haul 1310nm, SMF		

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The SCORPION-4 Media Processing Platform is a stand alone, compact form factor, multi-service signal conversion, aggregation gateway capable of simultaneously transporting video, audio and data services over 1GbE/10GbE and 25GbE Ethernet WAN networks. Using SCORPION Mini I/O Modules, the SCORPION-4 is highly flexible and can accommodate a multitude of signals including 12G single-link SDI, ethernet, MADI, AES, HDMI, intercom and serial data. The SCORPION-4 features encapsulation and de-encapsulation to IP over dual 10GbE or 25GbE trunk ports.

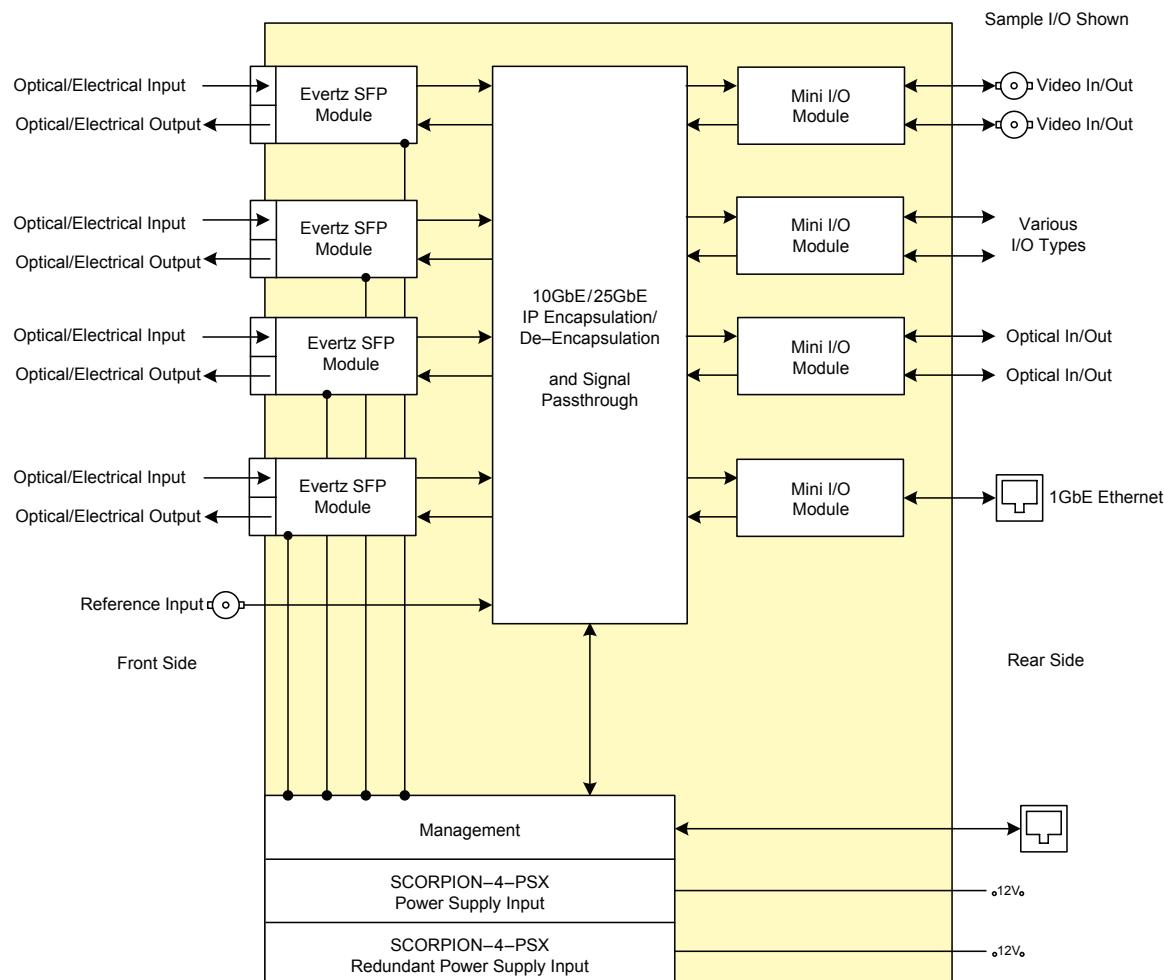
When combined with other compatible IP gateways including the 1RU SCORPION-X18, the SCORPION-4 becomes part of an integrated, scalable transport network with point-to-point, ring and hub-and-spoke configurations enabling the sharing of content from different sites using different transport media.

The SCORPION-4 possesses a small fanless form factor, and is designed to be operated in portable and/or low noise environments. The SCORPION-4 is ideal for mobile and live sports production applications.



►Features & Benefits

- High density and fully modular in a standalone form factor
- All in one platform to handle video, audio, data transport needs
- IP Encapsulation/De-encapsulation supporting SMPTE ST 2022-6 and SMPTE ST 2110
- 1GbE/10GbE/25GbE WAN IP Network Support
- Up to 4x SCORPION Mini I/O Modules can fit into the standalone frame
- Up to 4x SFP Ports for Ethernet WAN IP Connectivity
- Supports MSA SFP transceivers
- Diverse signal Types such as 12G/6G/3G/HD/ASI, Ethernet, Serial Data, Intercom, HDMI, USB and Intercom
- Main and Redundant Power Supplies
- Onboard signal integrity and link analysis
- Multiple control options including SNMP, Web Access, Panels and MAGNUM
- Fanless operation with integrated heatsink for power dissipation



► Specifications

System	Electrical Inputs/Outputs			Electrical
Density:	4x SFP's	Connector:	Dependant on SCORPION Mini I/O Module (see appropriate specifications)	Power Supply Configuration:
Impedance:	4x SCORPION Mini I/O Modules	Impedance:	Dependant on SCORPION Mini I/O Module (see appropriate specifications)	Dual External Supplies (primary/secondary) DC Input 12V DC (external power supplies require 110–220V AC, 50/60Hz)
Connector:	Dependant on SCORPION Mini I/O Module (see appropriate specifications)	Reference	Dependant on SCORPION Mini I/O Module (see appropriate specifications)	Voltage: 110–220V AC, 50/60Hz Power Consumption: 25W empty, 132W fully loaded Connectors: 12V DC, auto ranging 100–240V AC 50/60Hz adapter included
Communication and Control	SNMP over IEEE 802.3/U (10/100/1000 BaseTx) RJ-45 connector	Number of Inputs:	1	Status Indicators: LED on unit
Ethernet:	SNMP, Web Access, Direct Control and Control Panels	Connector:	BNC IEC 61169.8 Annex A	
Control:		Reference Inputs:	Analog 625 or 525, Tri-Level HD	
		Impedance:	75Ω	
		Physical	Dimensions: 2.5" H x 8.5" W x 6" D Module Capacity: 4x Evertz SFP modules 4x SCORPION Mini I/O Modules	Safety: CSA Listed, complies with EU Safety Directive EMC: Complies with FCC part 15, Class A Complies with EU EMC Directives
			Operating Temperature: 0–50 °C	

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Compatible SFPs: See separate Evertz compatible SFPs specifications

Mini I/O Modules: See separate Mini I/O Module specifications

10G Trunk Interfaces: See SFP10G-TR Series specification sheet

► Available Mini I/O Modules * See Mini I/O Module specification sheet for more details

MIO-VB-2-12G	Dual BNC 12G/6G/3G/HD/SD/ASI Video Access Module
MIO-GE-RJ45	1GbE Ethernet Access Module
MIO-AES-IP	AES Access Module over IP
MIO-AES-D4	AES Audio De-embedder Module
MIO-IT-IP	Intercom Transceiver Module (2x Analog Audio In/Out, 2x Serial Data, 4x GPIO), dual slot
MIO-HDMI-IN-3G	HDMI Input Access Module
MIO-HDMI-OUT-3G	HDMI Output Access Module
MIO-HDMI-IN-4K	4K SDI and HDMI Input Module, dual slot
MIO-HDMI-OUT-4K	4K SDI and HDMI Output Module, dual slot