

VMCR-18-X-X

18 Channel HD/SD Video Media Converter Rack (19" 1RU)



FEATURES

- Compatible with all types of Stratos's Video Media Converter modules (sold separately)
- 19" 1RU design with rack slide to simplify VMC change over in rack installations
- Throw down enclosed version available
- RoHS-6 compliant
- 110/240V Dual power supply (1+1 Protection) for up to 18 Video Media Converter (VMC) modules
- Digital Diagnostic Monitoring Interface (DDMI) read out via Ethernet 10/100T compliant web enabled port
- Custom Configurable with any combination of TX/RX BNC-to-Fiber Media Converter
- Front panel transmitter/receiver LED indications (mirrors video media converter LED functions)
- Front panel channel ID strip
- Front panel power supply and temperature status LEDs
- Identify unit type (TX or RX) without opening Rack or Throw down cover

ORDERING INFORMATION:

VMCR-18-X-X

POWER SUPPLY WALL PLUG

- D = Domestic
- E = European
- U = U.K.
- A = Australian

CONFIGURATION

- R = Rack Kit (24" to 30" depth)
- T = Throw Down with Cover (Not shown in picture above)

APPLICATIONS

- Field production, such as sports and special event
- Studio Infrastructure links
- Cable broadcasting networks
- Outside broadcast trucks and vans
- Video distribution in convention and conference centers.

PRODUCT OVERVIEW

Stratos' s 18 channel BNC-to-Fiber Media Converter rack is broadcast video aggregation and transport product. It is compatible with Stratos' s VMC-T-X-2 (TX), VMC-R-X-2 (RX), MVMC-T-H-XX (TX), and MVMC-R-H-2 (RX) product line of media converters.

LINK DISTANCE

Stratos's 18 channel BNC-to-Fiber Media Converter rack is capable of providing minimum link distance ranging from 16km to 41km depending on types of Video Media Converter (VMC or MVMC) modules populated in the VMCR-18-X-X. Refer to appropriate VMC or MVMC data sheet for more information.

RECOMMENDED OPERATING CONDITIONS

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	NOTES
Operating Ambient Temperature	Ta	0		+55	°C	When fully populated with 18 media converters
Input Voltage	Vin	90		264	VAC	
Power Dissipation			35	40	W	When fully populated with 18 media converters

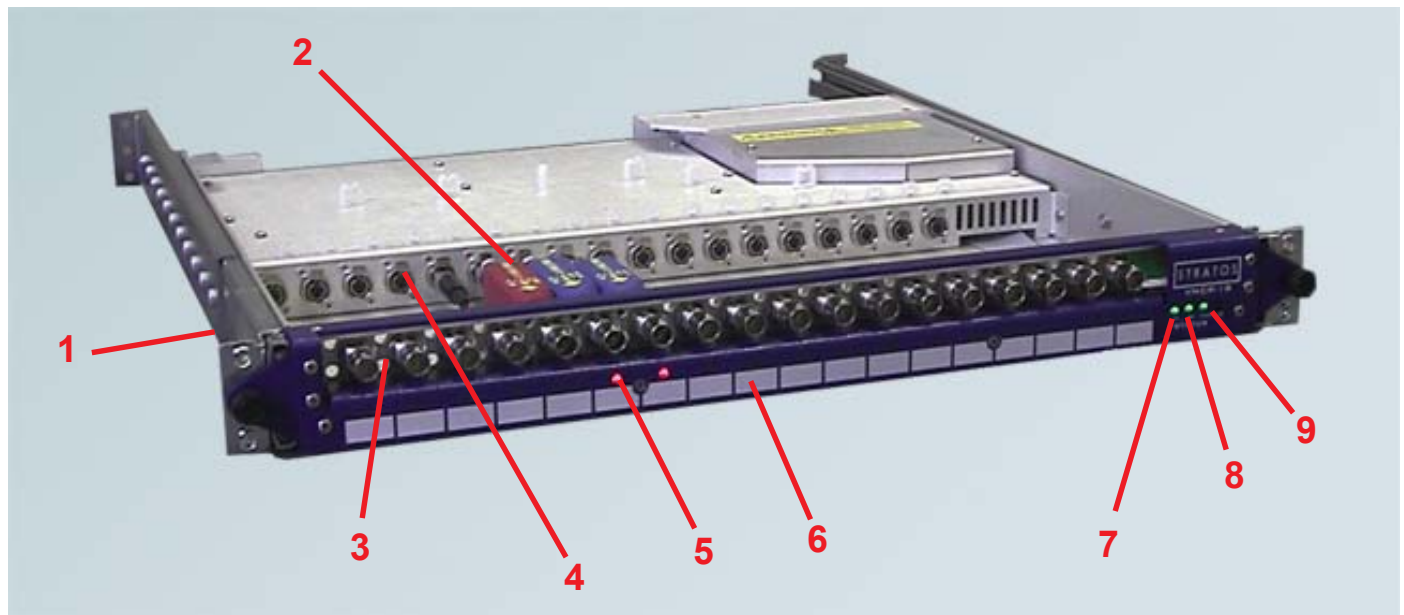
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DESCRIPTION:

(1) Slide Tray: This is a 19" 1RU rack kit which slides out of the rack chassis to allow easy installation or change over of BNC-to-Fiber Video Media Converters (VMC). The rack kit has adjustment range for 24" to 30" chassis. An optional cover can create a throw down version without rack rails (not shown).

(2) BNC-to-Fiber Media Converter: The VMCR-18-X-X is custom configurable with any mix of simplex transmitter (red) or simplex receiver (blue) media converter(s). The type of media converter populated in each VMCR-18-X-X position is automatically identified by the Digital Diagnostic Monitoring Interface (DDMI).

(3) TX Input/ RX Output: Recessed 75Ω single ended female-to-female BNC bulk head connectors (x18). These ports are used for incoming/outgoing single ended electrical TX/RX signals respectively.

(4) BNC-to-Fiber Media Converter Power Supply: Recessed female Mini-XLR bulk head connectors (x18). These ports are used to supply power to the Video Media Converter (VMC). These connector also provide DDMI to the unit.

(5) Port Indication/Status LEDs (x18): These are multi-colored/multi-function LEDs. When the ID button (#9) is pressed and held, they indicate the type of media converter module populated in each port ("RED" = Transmitter and "BLUE" = Receiver). The default function indicates the status of the module that is populated in each ports. Depending on the type of module populated within each port, the color code for the status indication LEDs is shown in tables below:

SIMPLEX TRANSMITTER	
STATUS	CONDITION
Green	Normal Operation
Red	Transmit Fault
Blinking Green	No Cable Connected
Blinking Red	DDMI Alarm
Blinking Orange	DDMI Warning
Blinking Blue	Power Short on VMC or MVMC

SIMPLEX RECEIVER	
STATUS	CONDITION
Green	Normal Operation
Red	Optical Input Singal out of Range
Orange	Re-Clocker Not Locked
Blinking Green	LOS (No Optical Input Signal)
Blinking Red	DDMI Alarm
Blinking Orange	DDMI Warning
Blinking Blue	Power Short on VMC or MVMC

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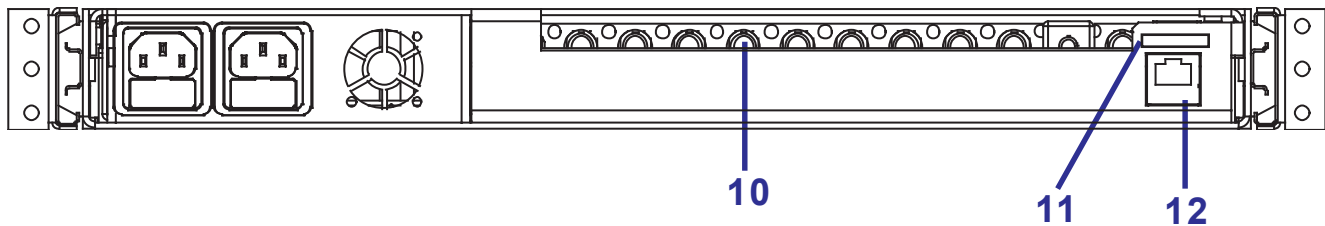
(6) **Channel ID Strip** : This is dry erase marker write-on channel designation strip

(7) **Power Supply Indication LEDs (P1/P2)**: These two LEDs indicate the status of the VMCR-18-X-X dual power supplies. The VMCR-18-X-X is designed with dual power supply for 1+1 protection. Therefore, when the individual power supply is functioning properly, its LED will be "GREEN". When there is a fault in the either of the power supply, the LED for that particular power supply will be "RED".

(8) **Temperature LED**: This LED indicates the VMCR-18-X-X internal temperature status. "RED" LED indicates internal temperature has exceeded factory set temperature level (caused by failure with cooling fan or airflow blockage). "GREEN" LED indicates normal operation.

(9) **Identification Button**: When pressed and held, the port indication LEDs (#5) will light up for the ports that are populated with video media converter modules. "RED" indicates a simplex transmitter and "BLUE" indicates a simplex receiver is installed.

Back View



(10) **Fiber Cable Strain Relief Shelf**: This is user provided fiber cable strain relief mounting location. This is used to customize the unit to various fiber optic cable types and to create mounting from which a service loop from rack can support tray (#1) operation.

(11) **Default IP Address**: This label shows the default IP address of a particular VMCR-18-X-X unit. The subnet mask is 255.255.0.0 and the gateway is 0.0.0.0 (none). Effective January '07, the VMCR-18-X-X rack includes a feature for user selectable IP address. Refer to VMCR-18-X-X installation Manual for instruction on how to change the default IP address (http://www.stratoslightwave.com/PDF/615-VMCR_Manual_Rev2.pdf).

(12) **Web Enable Remote Monitoring Port**: This is a Ethernet 10/100T compliant web enabled port which allows remote monitoring of the VMCR-18 and its installed Video Media Converters (VMC). An example of the top level Digital Diagnostics read-out is shown on following page. Depending on particular type of VMC installed, the Video Media Converter Rack Manager display will be as follows:

VMC Type	PROTOCOL	Block Color	Text Color
Transmitter	HD	Red	Yellow
	SD	Red	White
Reveiver	HD	Blue	Yellow
	SD	Blue	White

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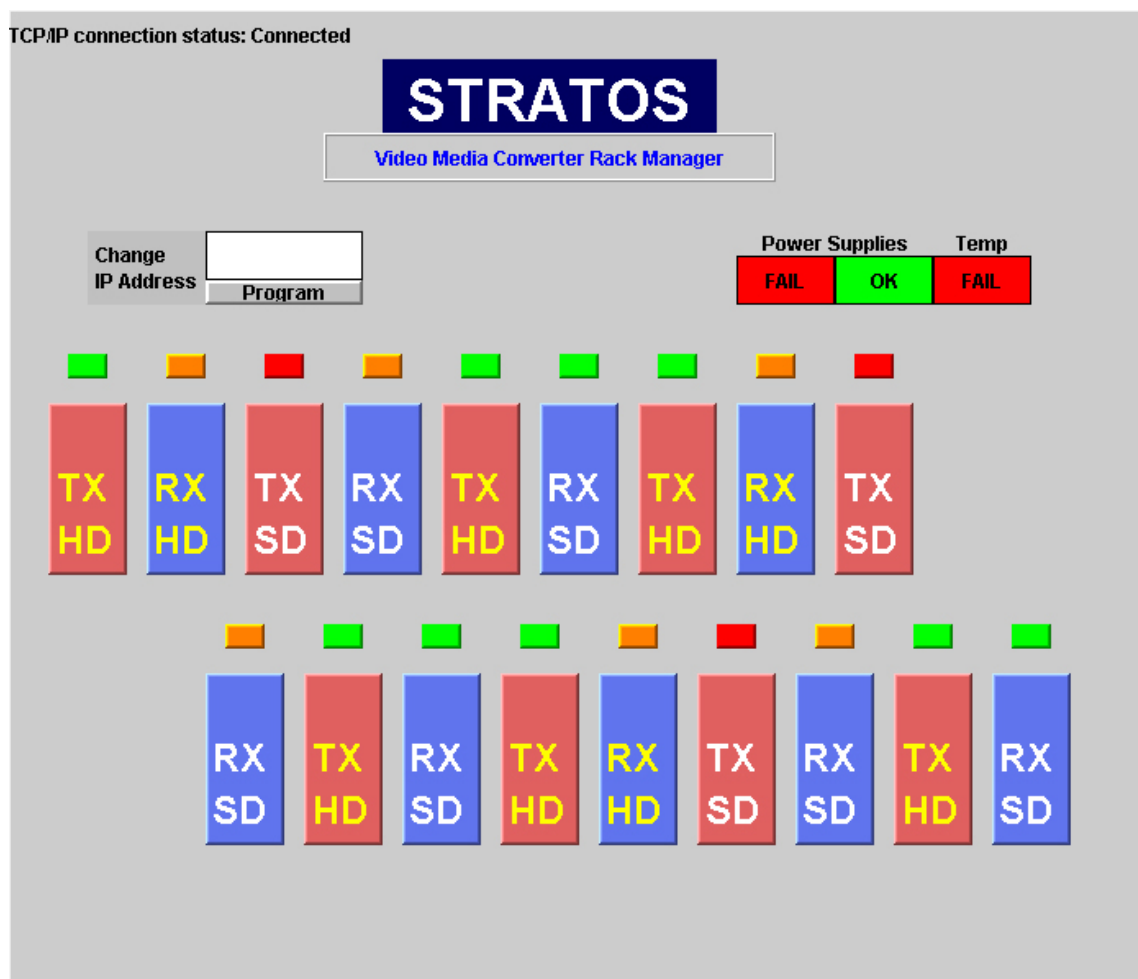
AGENCY CERTIFICATION FOR VMCR-18-X-X WITHOUT VIDEO MEDIA CONVERTER MODULES

Requirement	Condition	Status
FCC	Class A, Subpart 15	Passed
UL	UL1950	UL File#: E218469
CE	73/23/EEC (IEC/EN-60950-1:2000)	E2184690-A1-UL-1
	89/336/EEC (EN55022:1998 - Class A	Passed

SHIPPING INFORMATION

	English Units	Metric Units
Shipping Weight	16.4kb	7.5kg
Shipping Dimensions	24.25 x 24.25 x 6.5in	62 x 62 x 17cm

DIAGNOSTICS WEB PAGE (MAIN SCREEN): The main screen (shown below) displays all of the installed Video Media Converter Modules (VMC) and their status. When a user clicks on a particular module, it will bring up a new lower level windows (shown on following page) with more detailed digital diagnostics information. While the user can have as many of the those lower level windows open at one time, opening more than 6 windows will slow down their refresh rate.




System IP Address Update Page

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VMCR-18: Slot 13 Status


**TX
HD**

Serial Number	AAJT578	Revision Number	3
Part Number	VMC-T-H-2	Manufacturing Date	041216


Data Rate	NA
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		HIGH	LOW	
Part Temperature	35 °C			TX Fault
Laser Bias Current	7 mA			Cable Detect
Transmit Optical Power	151.2 uW			Loss of signal
Received Optical Power	NA			Reclocker Lock

System IP Address Update Page

STRATOS

VMCR-18: Slot 17 Status


**RX
HD**

Serial Number	DVT9	Revision Number	3
Part Number	VMC-R-H-2	Manufacturing Date	041216

Data Rate	1485 Mb/s
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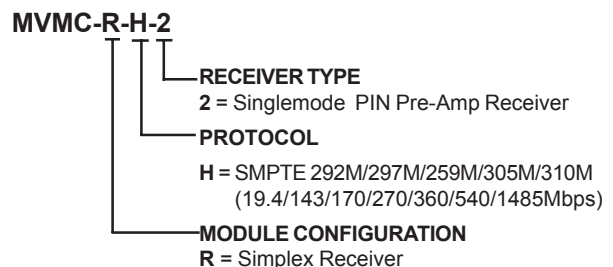
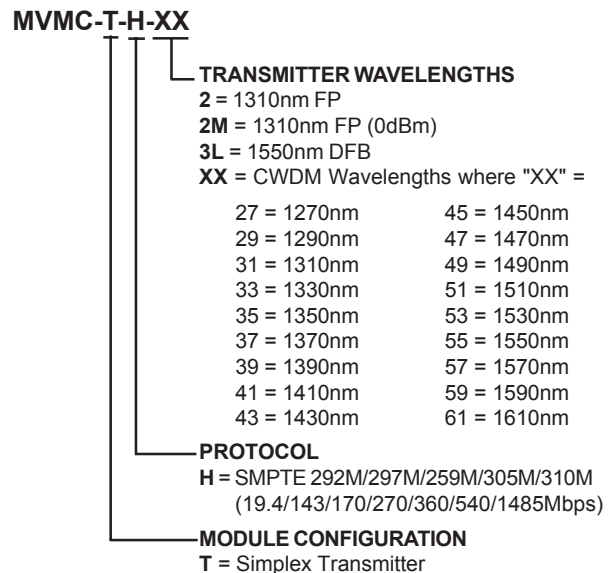
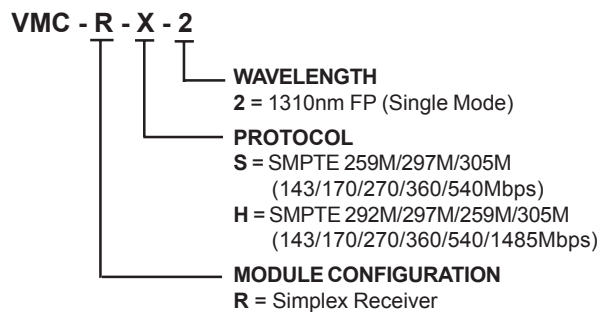
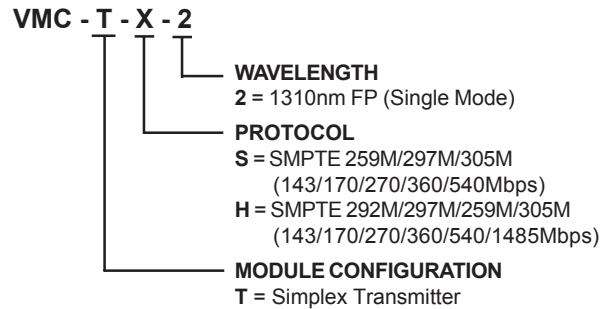
		HIGH	LOW	
Part Temperature	37 °C			TX Fault
Laser Bias Current	NA			Cable Detect
Transmit Optical Power	NA			Loss of signal
Received Optical Power	0.5 uW			Reclocker Lock

System IP Address Update Page

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BNC-to-FIBER MEDIA CONVERTER ORDERING INFORMATION:



COMING SOON...

Family of Video Media Converter Products Including:

- Multi-channel O/E Distribution Amplifier
- Video Media Converter with Audio & Data

All usable in VMCR-18-X-X frame

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