

# VPX981

## Optical Amplifier/Splitter, 6U VPX



VPX981

## Key Features

- High channel count optical splitter, 92-way output
- Dense backplane fiber output via VITA 66.1
- Amplifier compensates for splitter loss
- Standard 6U VPX form factor
- Robust construction suitable for MIL-STD-810 and MIL-STD-167-1A
- Management Port to front and rear

## Benefits

- Integrates into OpenVPX chassis
- Suitable for high channel count beamforming applications
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

OpenVPX™



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# VPX981

VPX981 is an optical amplifier/splitter module for use in OpenVPX platforms requiring signal distribution over fiber, such as VTX350. An optical signal received from front-panel LC1 is amplified then split to provide 92 outputs (90 to the rear via MT ferrules and 2 to the front via LC UPC connectors).

Power matching between outputs is within +/- 1dB and all optical I/O is over single-mode 1551 nm fibers.

The module draws power from the P0 connector which also provides a Serial Port for control.

Contact VadaTech sales for particular gain and return loss requirements.



Figure 1: VPX981 Front View



Figure 2: VPX981 Rear View

# Block Diagram

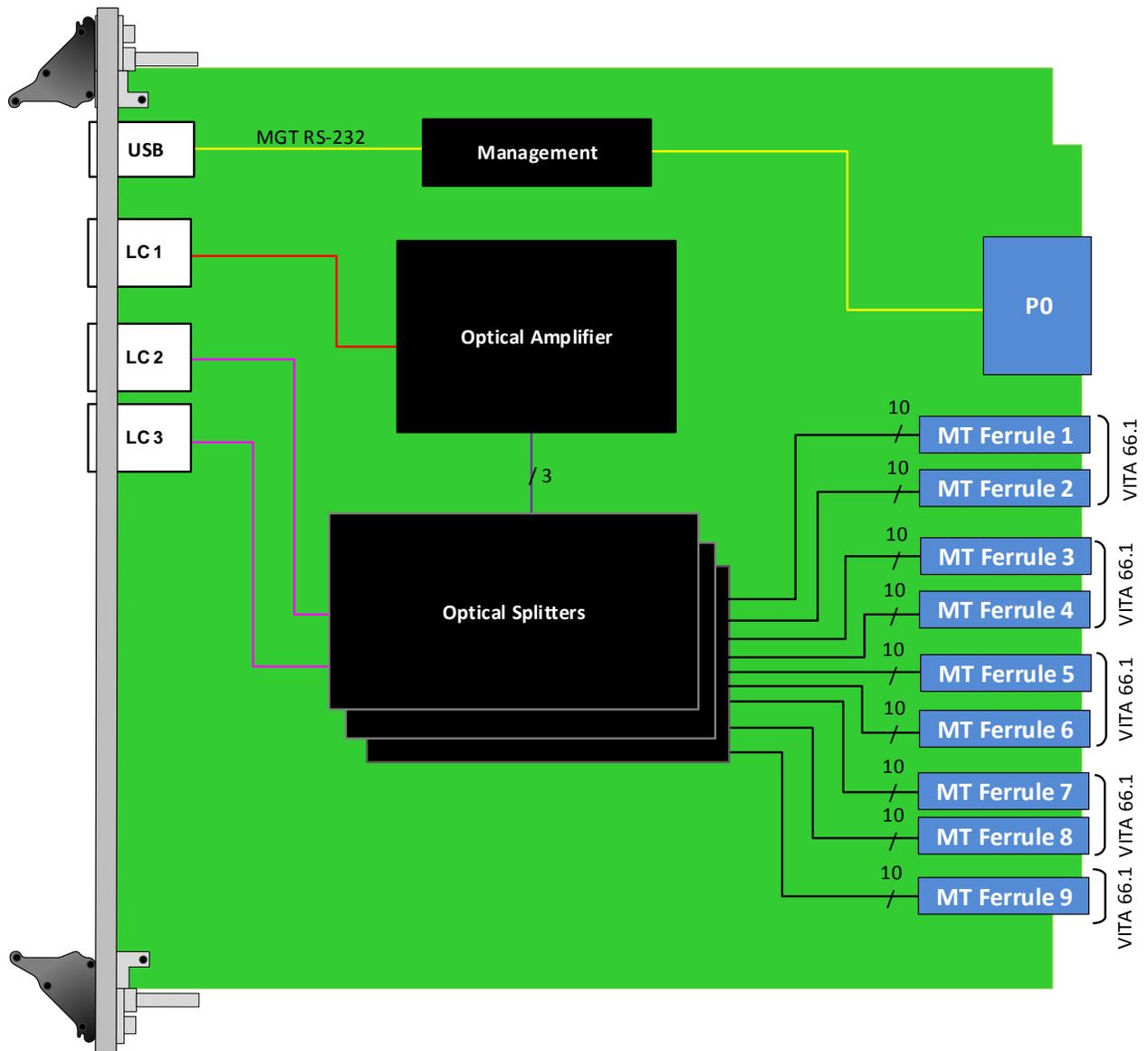


Figure 3: VPX981 Functional Block Diagram

# Specifications

Architecture		
Physical	Dimensions	6U, 10 HP
Configuration		
Power	VPX981	~10W
Front Panel		3x LC UPC, USB for RS-232 Management port
Rear Panel		5x VITA 66.1 Connectors, P0 Connector
VPX Interfaces	Slot Profiles	See <a href="#">Ordering Options</a>
	Rear IO	P0 power and management Port
Other		
MTBF		MIL Hand book 217-F@ TBD hrs
Certifications		Designed to meet FCC, CE and UL certifications, where applicable
Standards		VadaTech is certified to both the ISO9001:2015 and AS9100D standards
Warranty		Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>

## INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

# Ordering Options

## VPX981 – 00C-000-GHJ

		<b>G = Applicable Slot Profiles</b>
		0 = 10 HP
		<b>H = Environmental</b>
		See <a href="#">Environmental Specification</a>
<b>C = VPX Connector Type</b>		<b>J = Conformal Coating</b>
0 = Standard 50u Gold Rugged 1 = KVPX Connectors		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

## Environmental Specification

Option H	Air Cooled			Conduction Cooled	
	H = 0	H = 1	H = 2	H = 3	H = 4
<b>Operating Temperature</b>	AC1* (0°C to +55°C)	AC3* (-40°C to +70°C)	CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
<b>Storage Temperature</b>	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
<b>Operating Vibration</b>	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)	V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
<b>Storage Vibration</b>	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
<b>Humidity</b>	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing

Notes: \*Nomenclature per ANSIVITA 47.

## Related Products

VPX550



- Xilinx Kintex UltraScale™ XCKU115 FPGA
- COM Express Module Type-6
- 8 GB of DDR4 Memory to FPGA

VPX551



- Dual Kintex UltraScale™ XCKU115
- 16 GB of 64-bit wide DDR4 Memory to each FPGA
- Rear fibre I/O via VITA 66.5

VTX350



- 6U VPX Chassis, 19" Rack Mountable per EIA-310D
- Rugged Chassis with High Density Fiber Optic I/O
- Fiber Optical Backplane per VITA 66.4 or 66.5

# Contact

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- Collaborative approach
- Mutual success

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- Agile production
- Accelerated deployment
- AS9100 accredited



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