

Victor Series Switch Matrix/Router

24 x 8 Combining L-band

VTRc-100 is an extended L-band 24 x 8 combining matrix in a compact 1U chassis.



Remote control & monitoring
via RJ45 Ethernet via RJ45,
10BaseT/100BaseTx,
ETL TCP/IP protocol,
SNMPv3 & Web
Browser Interface

Compact
housed in a 1U high
chassis

Resilience
from dual redundant
hot-swap power
supplies & field
serviceable HMI &
CPU

RF Parameters					
Capacity		Up to 24 inputs x 8 outputs			
Routing		Combining, non-blocking		Any inputs can be routed to each output	
Frequency Range		850-2450 MHz			
Switching Time		< 50ms (From receipt of a command to implementation of path change)			
RF Connectors		50 Ω SMA	50 Ω BNC	75 Ω BNC	75 Ω F-type
Flatness	Full Band	±1.25 dB	±1.75 dB	±2.0 dB	±2.0 dB
	850-2150 MHz	±1.25 dB	±1.25 dB	±1.5 dB	±1.5 dB
	Any 36 MHz	±0.2 dB	±0.3 dB	±0.5 dB	±0.5 dB
Input Return Loss	Typ.	20 dB	20 dB	14 dB	14 dB
	Min.	14 dB	12 dB	10 dB	8 dB
Output Return Loss	Typ.	20 dB	20 dB	14 dB	14 dB
	Min.	14 dB	12 dB	10 dB	8 dB
Gain	Gain	0 ± 1 dB		Typical, mean across band	
	Gain Control	-5 to +5 dB		Settable at each input	
	Gain Steps	1 dB			
1 dB GCP	850 MHz	7 dBm		1 dB Gain Compression point, output power, at Unity Gain	
	1500 MHz	7 dBm			
	2150 MHz	5 dBm			
	2450 MHz	5 dBm			
OIP3	Full Band	Typ. 24 dBm, Min. 20 dBm		At 0 dB Gain	
	850-2150 MHz	Typ. 24 dBm, Min. 21 dBm			
OIP2	Typ.	33 dBm		At 0 dB Gain	
	Min.	30 dBm			
Isolation	I/P - O/P	60 dB		Minimum between any 2 ports	
	I/P - I/P	75 dB			
	O/P - O/P	75 dB			
Group Delay		≤ 1 ns			
Noise Figure	Typ.	23 dB at 0 dB Gain, with one input routed to one output			
	Max.	26 dB at 0 dB Gain, with one input routed to one output			
Input RF Power		+20 dBm		Absolute maximum	
Environmental					
Temperature		Operating: 0 to 45°C Storage: -20°C to +75°C			
Location / Humidity		Indoor use only / 20 to 90% non-condensing			
Altitude		10,000 feet AMSL (Operational) 30,000 feet AMSL (Storage)			
Gain Stability vs Temperature		0.05 dB/°C			
Power					
PSU Power		85-264Vac 50-60Hz		Fused 2A	
AC Consumption		40W		Max. consumption at steady state, no load	
PSU		Dual redundant		Diode OR	
MTBF	Chassis	> 250,000			
	Matrix card	> 100,000			



System Control	
Local Control & Monitoring	HMI
Remote Control & Monitoring	Ethernet via RJ45, 10BaseT/100BaseTx ETL TCP/IP, SNMPv3,HTTPS, Built in Web Server
Alarms	Via Ethernet (RJ45) or HMI
PSU Redundancy	Dual Redundant & Alarmed
Physical	
Dimensions	1U high x 650mm deep x 19" wide
Weight	10 kg
Colour	RAL 9003 semi-matte (white)
Spec. Version	1.5

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

Note 3: Typical parameters are guide figures and measured data may deviate from the quoted figures. ETL endeavours to exceed the quoted typical parameters where practically possible.