



CROSSFIRE

# CPOI

## CARRIER POINT OF INTERCONNECT

16 x RF Services  
8 x Modular Card Slots  
Attenuator or Splitter Cards  
QMA or NEX10 Output Ports

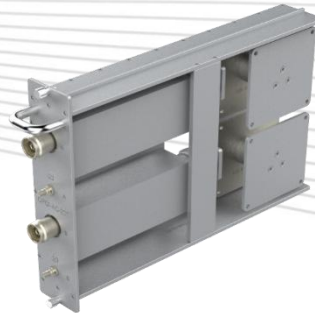
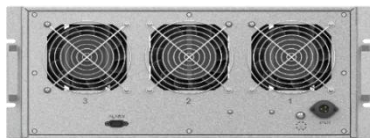
## OVERVIEW

The CrossFire CPOI is a modular rack mounted Point of Interconnect (POI), designed to provide RF attenuation and/or splitting of RF signal from Radio Base Stations and other signal sources. The solution supports up to 8 cards fitted into the POI sub-rack, with each card offering either attenuation of two RF services or 2-way splitter of six RF services. In a fully utilized sub-rack, it is possible to attenuate 16 inputs with attenuation options from 10dB to 40dB for 16 outputs, or 12 inputs with both attenuation and splitting for 24 outputs. The product is an ideal component for the CrossFire Access Unit, with which up to 16 low power RF inputs are available across 4 discrete band modules.

## KEY FEATURES

- 5U 19" Sub-Rack Modular Architecture
- Additional fans for high-reliability and heat extraction
- AC or DC Power options (to support fans & alarms)
- 4.3-10 Inputs on Attenuation Cards to support high-power
- Up to 8 wideband low-PIM Attenuation Cards
- 2 RF services per Attenuation Card
- 6 RF services per 2-Way Splitter Card (12 outputs)
- QMA or NEX10 Outputs on Attenuation and Splitter Cards

## SYSTEM ELEMENTS



**CPOI-S58x**  
Sub-Rack

## TECHNICAL SPECIFICATIONS

### ELECTRICAL

#### Attenuation Card

Frequency	600 – 2700 MHz			600 – 3800MHz		
Attenuation Value	CPOI-AC-10x	CPOI-AC-20x	CPOI-AC-35x	CPOI-AC38-10x	CPOI-AC38-20x	CPOI-AC38-35x
	10 ± 1.2 dB	20 ± 1.2 dB	35 ± 1.5 dB	10 ± 1.7 dB	20 ± 1.7 dB	35 ± 2.0 dB
VSWR	1.35					
3 <sup>rd</sup> Order IMD	-160dBc @ 2 x 43dBm					
Impedance	50 Ohms					
Maximum Input Power per Port	80 Watts					

#### Splitter Card

Frequency	600 – 2700 MHz
Insertion Loss	≤3.5dB
VSWR	1.3
3 <sup>rd</sup> Order IMD	-110dBc @ 2 x 43dBm
Impedance	50 Ohms
Maximum Input Power per Port	2 Watts

#### Sub-Rack

AC Power	100-240V AC, 50/60Hz
DC Power	48VDC ± 20%
Maximum Power Consumption	15 Watts
Power Connector Type	Circular Threaded Plug. AC: 3pins / DC: 2pins

### Mechanical

RF Connectors		CPOI-ACxx-xxQ	CPOI-ACx-xxT	CPOI-SC-62Q	CPOI-SC-62T
	Input Ports		4.3-10 Female	4.3-10 Female	QMA Female
Output Ports		QMA Female <sup>2</sup>	NEX10 Female	QMA Female	NEX10 Female
Physical Alarm (on Sub-Rack)	DB9 Female (fan status)				
Operating Temperature	-10°C ~ 50°C / 14°F ~ 122°F				
Storage Temperature	-25°C ~ 70°C / -13°F ~ 158°F				
Humidity	5% to 85% (Non-Condensing)				
Cooling <sup>1</sup>	3 x Fans				
Mean Time Between Failure (MTBF)	>100,000 hours				
Installation (Sub-Rack)	19" Rack Mounted (Front or Back)				
Installation (Cards)	Slot with captive screws (inside CPOI sub-rack)				
Ingress Protection Rating	IP30 (Indoor)				

Note1: System can remain operational with 2 fans in service. 3 fans are needed to achieve stated MTBF.

Note2: It's 4.3-10 Female connector for 10dB & 20dB attenuation card.

DIMENSIONS	
CPOI-S58x Sub-Rack: Width x Height x Depth (Weight)	440mm x 212mm x 366mm (15.0kg) / 17.32in x 8.35in x 14.41in (33.07lbs)
CPOI-ACx-x Attenuation Card: Width x Height x Depth (Weight)	48mm x 208mm x 283mm (4.0kg)/ 1.89in x 8.19in x 11.14in (8.82lbs)
CPOI-SC-62x Splitter Card: Width x Height x Depth (Weight)	48mm x 208mm x 130mm (1.7kg) / 1.89in x 8.19in x 5.12in (3.75lbs)

ORDERING INFORMATION	
Part Code	Part Description
<b>Sub-Rack</b>	
CPOI-S581	Carrier POI Sub-Rack, 5U 19" Rack Mounted, 3 Fans, 8 x Card Slots, Type E/F AC Lead
CPOI-S582	Carrier POI Sub-Rack, 5U 19" Rack Mounted, 3 Fans, 8 x Card Slots, Type I AC Lead
CPOI-S583	Carrier POI Sub-Rack, 5U 19" Rack Mounted, 3 Fans, 8 x Card Slots, Type B AC Lead
CPOI-S584	Carrier POI Sub-Rack, 5U 19" Rack Mounted, 3 Fans, 8 x Card Slots, Type G AC Lead
CPOI-S58D	Carrier POI Sub-Rack, 5U 19" Rack Mounted, 3 Fans, 8 x Card Slots, DC Power
<b>Attenuation Cards</b>	
CPOI-AC-10Q	Carrier POI, 600-2700MHz, 10dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs & Outputs
CPOI-AC-20Q	Carrier POI, 600-2700MHz, 20dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs & Outputs
CPOI-AC-30Q	Carrier POI, 600-2700MHz, 30dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, QMA Outputs
CPOI-AC-35Q	Carrier POI, 600-2700MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, QMA Outputs
CPOI-AC-40Q	Carrier POI, 600-2700MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, QMA Outputs
CPOI-AC-30T	Carrier POI, 600-2700MHz, 30dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, NEX10 Outputs
CPOI-AC-35T	Carrier POI, 600-2700MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, NEX10 Outputs
CPOI-AC-40T	Carrier POI, 600-2700MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, NEX10 Outputs
CPOI-AC2-10Q	Carrier POI, 600-3800MHz, 10dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs & Outputs
CPOI-AC2-20Q	Carrier POI, 600-3800MHz, 20dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs & Outputs
CPOI-AC2-30Q	Carrier POI, 600-3800MHz, 30dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, QMA Outputs
CPOI-AC2-35Q	Carrier POI, 600-3800MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, QMA Outputs
CPOI-AC2-40Q	Carrier POI, 600-3800MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, QMA Outputs
CPOI-AC2-30T	Carrier POI, 600-3800MHz, 30dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, NEX10 Outputs
CPOI-AC2-35T	Carrier POI, 600-3800MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, NEX10 Outputs
CPOI-AC2-40T	Carrier POI, 600-3800MHz, 35dB Attenuation Card, 2 x RF Services, 4.3-10 Inputs, NEX10 Outputs
<b>Splitter Cards</b>	
CPOI-SC-62Q	Carrier POI, 600-2700MHz, 2 Way Splitter Card, 6 x RF Services, QMA Inputs, QMA Outputs
CPOI-SC-62T	Carrier POI, 600-2700MHz, 2 Way Splitter Card, 6 x RF Services, NEX10 Inputs, NEX10 Outputs

Contact Us

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