



AT A GLANCE

- Optical coherent receiver in a compact 19"-chassis
- Coherent detection of high-speed optical dual-polarization m-PAM and m-QAM signals
- 40/70 and 100 GHz O-band and S-C-L-U-band versions are available

Features

- Coherent optical receiver in a compact 19"-chassis
- Simultaneous detection of I/Q and both polarizations
- Optical inputs for local oscillator and data signal
- Medium and high-bandwidth version
- Optical extender heads for high signal integrity

Applications

- Test and measurement
- Development of multi-band, high capacity transmission systems and components
- Polarization diverse coherent detection of high-speed data signals with various modulation formats (m-PAM, m-QAM, 4D)
- Coherent receiver frontend for single-mode optical data transmission
- O/E converter for detection of arbitrary optical waveforms
- High-resolution optical spectrum measurements

Target Specifications	CRF-40-EH-O	CRF-70-EH-O	CRF-100-EH-O
Operating wavelength range (nm) preliminary	O-band (1260 – 1360) S-C-L-banwd available upon request.		
6dB cut-off frequency (GHz)	> 50	> 70	> 100
Average CRF responsivity (sig mA/W)	30		
Output swing (mVpp) @1GHz	150		
CRF input Sig/LO power (dBm)	12/16		
Common mode rejection ratio (dB _c)	-18 (DC)		
Imbalance I _{sig} and I _{LO} (dB _c)	2 (DC)		
Phase deviation (deg)	+/- 6 (1280-1340 nm), +/- 10 (1260-1360 nm)		
Optical Return Loss (dB _o @1550nm)	30		
Dual polarisation	Yes		
Pol. extinction ratio for Sig & LO (dB _c)	20		
Internal local oscillator laser	No		
Optical extender head	Yes		
Optical connectors	SC-/FC-/LC-/E2000-APC		
HF-impedence (ohm)	50		
HF-connectors	female 1,85 mm V@		
Dimensions (W x H x D in mm)	482 (19'') x 45 x 460		

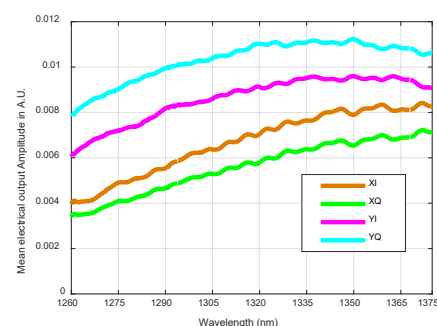
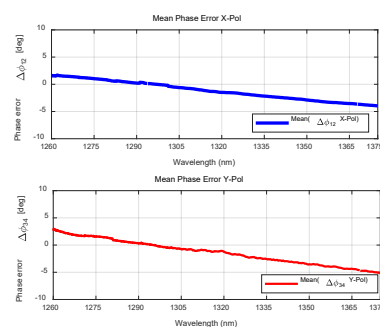
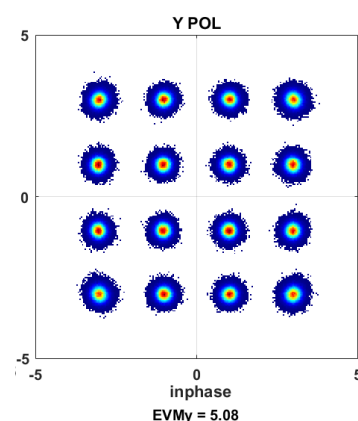
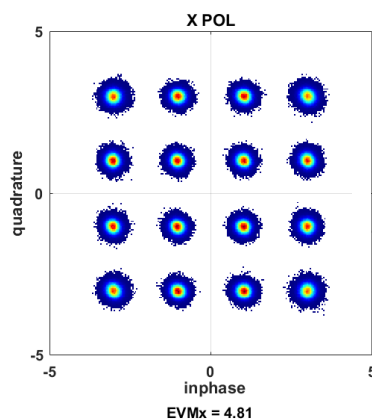


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Phase Error

Output Amp.