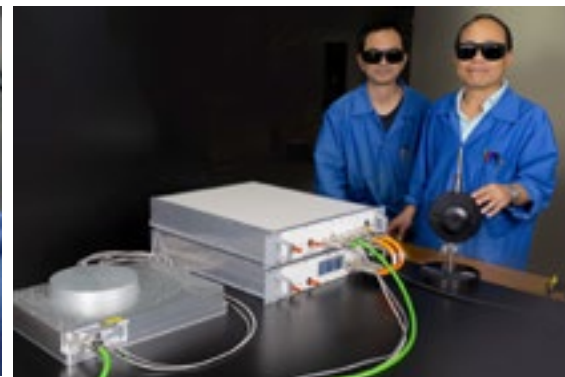


MPB
 MPB Communications Inc.
 focus on:
TELECOMMUNICATIONS
PRODUCTS & SERVICES
OFC 2021





HELPING OUR
CUSTOMERS REACH
THEIR RESEARCH AND
COMMERCIAL GOALS
FOR OVER 40 YEARS

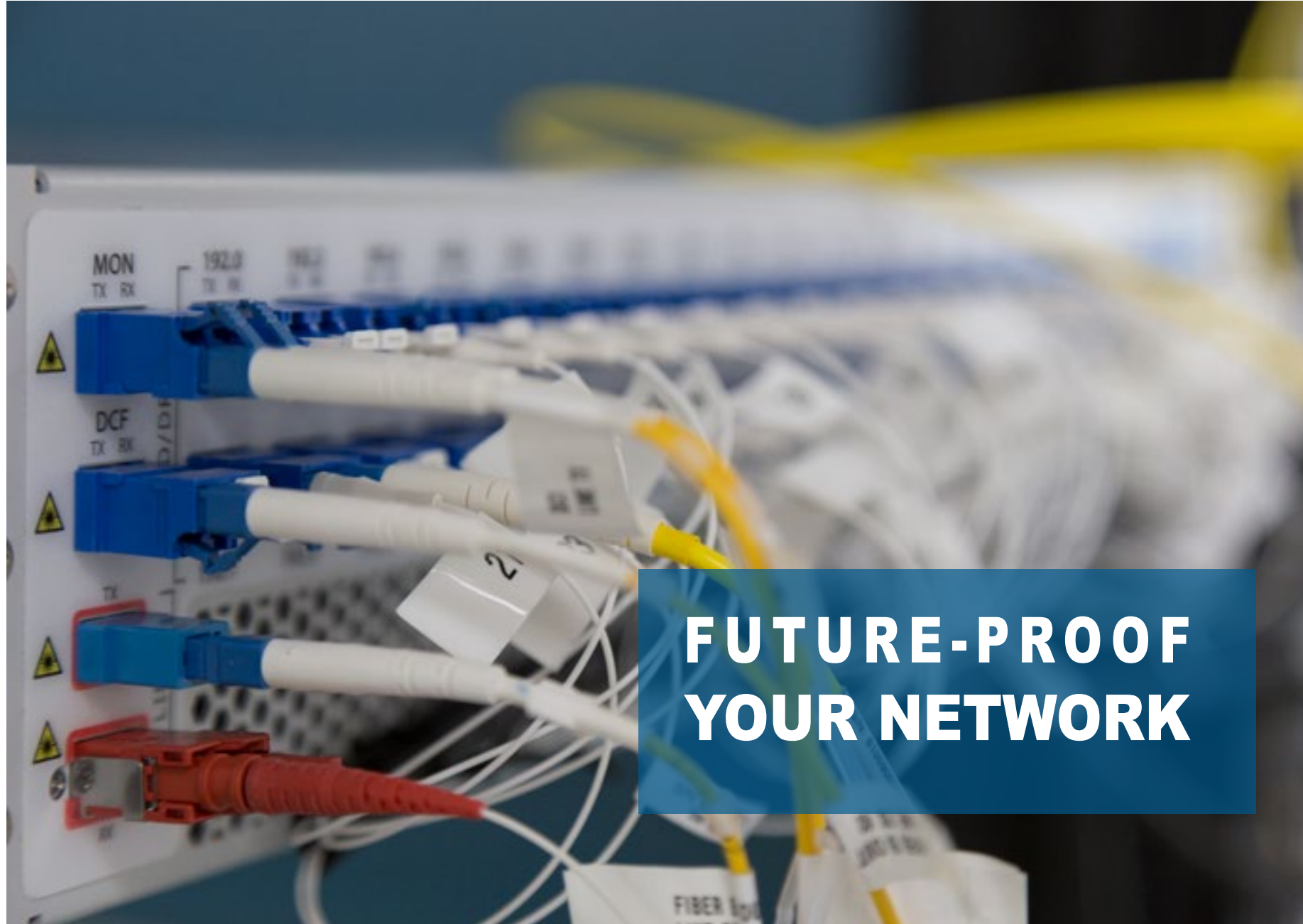
1 **CONTENTS**

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**FUTURE-PROOF
YOUR NETWORK**

focus on:

16 Channel Multi-Format DCI Line System

the newest member of our DCI-Series family



MPBC's DCI Eco 16 channel **Multi-Format DCI line system** is a flexible and cost effective single box solution that will easily adapt to meet evolving capacity requirements. Its multi-protocol capability allows for co-propagation of up to **16 DWDM channels on a single fiber** at PAM4 100G, 10G/40G NRZ and Coherent 100G modulation formats as well as **future proof 400G Coherent optics**.

The DCI-Eco's ease of use is unparalleled. Increase your network capacity in 3 simple steps:

1. Select your preferred transceiver
2. Plug-in the transceiver to the DCI-Eco unit
3. Let the **Zero Touch Provisioning** do the rest!

Learn More:



Find more information on this and our other DCI systems [on our website](#)



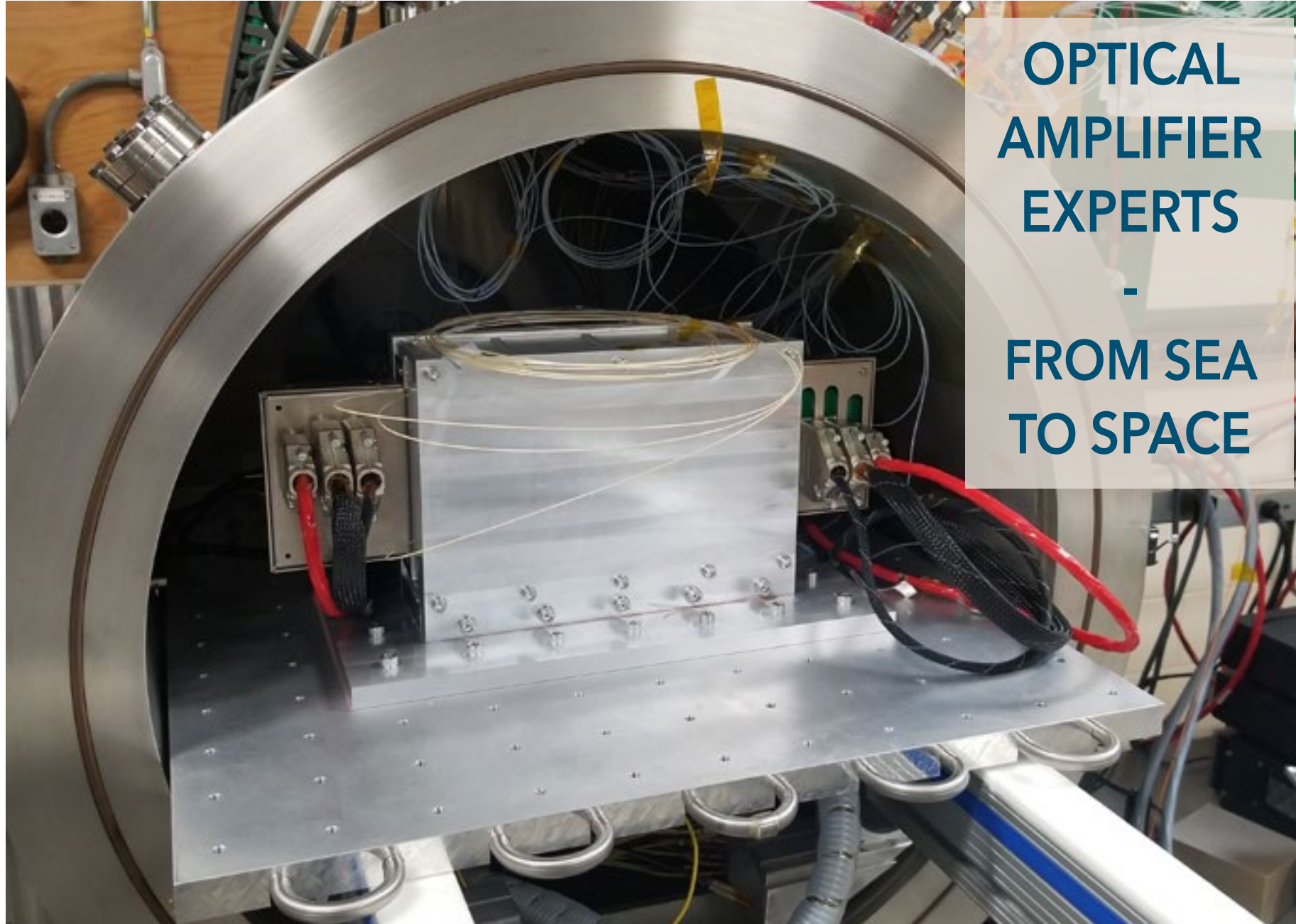
Check out our [YouTube Product Demonstration](#) on the DCI Eco 16 Channel Multi-Format Line System



Download our Specifications Brochure: [MPBC DCI Eco 16-Channel OLS.pdf](#)



Contact us directly to see how we can help you!
kim.boumansour@mpbc.ca
(+1) 514-694-8751 ex: 315



**OPTICAL
AMPLIFIER
EXPERTS**
-
**FROM SEA
TO SPACE**

focus on:

Space-Qualified Amplifiers

custom designs to meet mission-critical requirements



We provide qualified **PM and Non-PM Boosters and PreAmplifiers** for **LEO, MEO, and GEO**, where high reliability, low mass and low power consumption are essential. Our customized "New Space" designs use **COTS optical components**, which have undergone rigorous testing to ensure survivability under vacuum and radiation conditions. Optional radiation tolerant control electronics are available for simplified operation. Our custom mechanical housings are designed around your footprint and mission specific shock and vibration requirements, with additional radiation shielding for missions up to **100 krad**.

With our space qualified building blocks, we can move rapidly from custom EM designs, to successful QM qualification, to full FM serial production. All quality control processes are in place, making the transition from prototype to serial production ramp up seamless. R&D and manufacturing are conducted in our North American facility.

With **over 30 years of experience** in providing optical amplifiers for sensing, test systems, submarine and terrestrial communications, we are now launching into space.

Learn More:

Visit our extensive section on [Gain Modules](#) at [mpbc.ca](#)



Download our Gain Module Series Brochure: [Gain Modules - EOA & SPA Series.pdf](#)



Watch an overview of our [Space-based Amplifiers](#)



Contact us directly to see how we can help you!
claudette.linton@mpbc.ca
(+1) 514-694-8751 ex: 316

extend the capacity and reach of fiber optic systems up to 500 km without the use of repeaters



focus on:

VERSA2 Single Box Solution

compact integrated transport solution for low data rate, thin routes

The **Versa2** can be used as a **standalone**, network-ready telecom solution, **or in seamless combination** with the MPBC 2RU product family to further extend the unrepeated reach **up to 500 km**.

The Versa2 provides a cost-effective solution with a small footprint and very low power consumption. Configurations range from a single amplifier to an integrated transport solution, based on the reach, capacity, and availability requirements of the network.

A Versa2 box can be configured with **up to three independent units in a single chassis**:

Power Amplifier with saturated output powers of up to 21 dBm

Low-Noise Preamp providing near quantum-limit noise figure

Wavelength Converter which interface 1310 nm short-haul data transmission equipment to the 1550 nm region



Learn More:



Learn more about our extensive **VERSA2** standard combinations on our [web page](#)

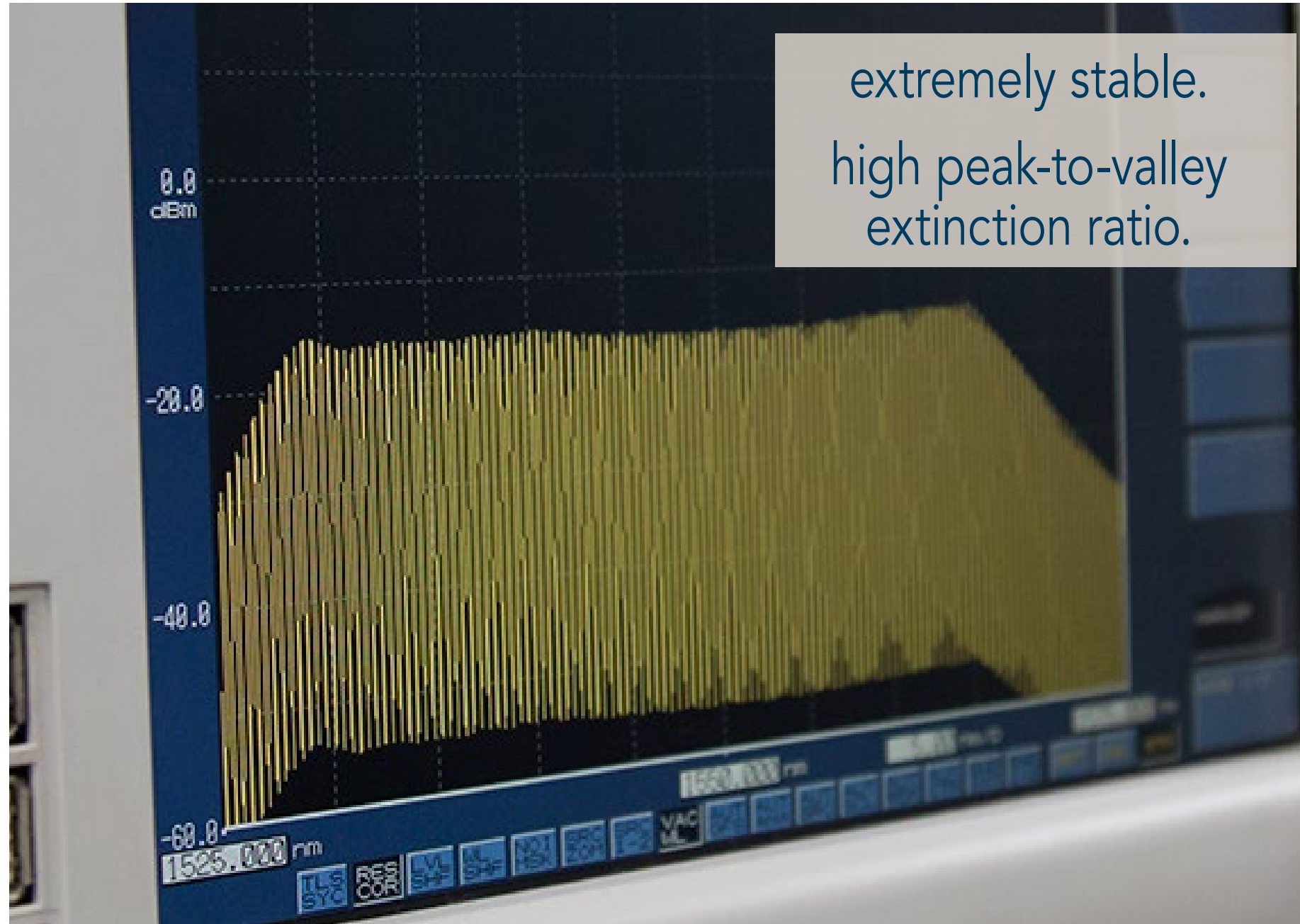
Amplifier Type	Amplifier	Amplifier P1	Amplifier P2
Amplifier / Preamp / Converter	1310 nm to 1550 nm	21 dBm	21 dBm
	1550 nm to 1310 nm	21 dBm	21 dBm
	1310 nm to 1310 nm	21 dBm	21 dBm
Wavelength Converter	1310 nm to 1550 nm	21 dBm	21 dBm
	1550 nm to 1310 nm	21 dBm	21 dBm
	1310 nm to 1310 nm	21 dBm	21 dBm



Download our **VERSA2 Series Overview brochure: 1RU Versa2 Series.pdf**



Get in touch! We have more combination-specific specification sheets to share, and are here to help. jimmy.herrera@mpbc.ca (+1) 514-694-8751 ex: 314



extremely stable.
high peak-to-valley
extinction ratio.

focus on:

DWDM CombSources

dramatically reduce equipment cost and setup time in DWDM system tests



MPBC's CombSource Series are high-power spectrally-sliced Erbium Broadband Sources **simulating up to 100 channels (50 GHz) locked to the ITU grid** at 22 dBm output power. An exceptionally versatile lab tool, you can:

- Simultaneously measure optical amplifier gain flatness and noise figure under conditions of full channel loading (high peak-to-valley extinction ratio extends NF measurement capability to high-power booster amplifiers)
- Measure the full band OSNR and channel power evolution over links consisting of multiple spans and optical amplifiers without the need for costly banks of DFB lasers
- Measure magnitude of inter-channel Raman pumping along a span for fully-loaded band case
- Test DWDM demux components

Learn More:

Our website features [information on our complete line of Test Instruments](#), including more information on our CombSource Series



Download our CombSource Series brochure: [DWDM CombSource Series.pdf](#)



Watch an [In The Lab video](#) showing how easy it is to operate our CombSource.



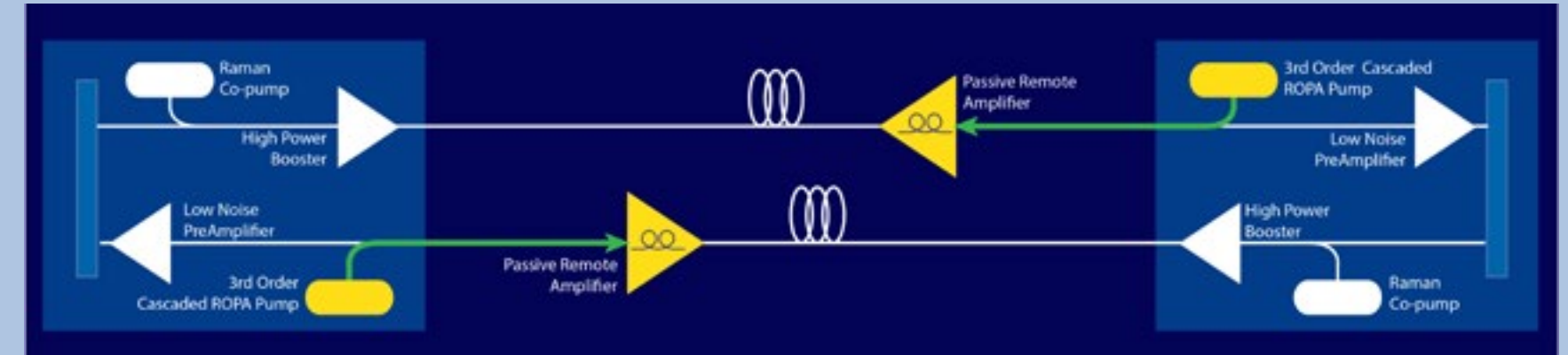
MPBC's CombSources can be designed to meet customer-specific requests. Contact us to discuss your requirements.
kris.sanapi@mpbc.ca
(+1) 514-694-8751 ex: 319



We can provide an unbiased third party opinion on the "best" network solution.

Telecommunications Services

extend your reach



MPB Communications is committed to providing our customers with the necessary resources, training, expertise, and technical assistance to maximize the potential of our products and technologies.

We offer a complete range of specialized engineering services that support the operation, maintenance, installation & commissioning and overall management of our comprehensive line of telecommunication equipment.

From pre-sales consultation to post-deployment

support, MPBC is focused on ensuring an optimized performance of our customers' networks by offering the following portfolio of services:

- Installation & Commissioning
- After Sales Support
- Training
- Consultation

For information on link optimization, network cost benefit analysis, system design, or system engineering, phone or contact us at info@mpbc.ca

MPB Communications Inc.

and some Adventures in Telecommunications



MPB begins operations

1980



project entry into telecommunications



TAT-9 UBM & STME

1990

OLE Long-Haul WDM Transmission System



Erbium Fiber Amplifiers and Broadband Sources introduced



1st Repeaterless System - 280 km for Hellenic Telecommunications Organization



MPB Communications incorporated



Deployment of MPBC's 1st Super Raman Pump

2000

EDFA Gain Modules introduced



1RU Product Line Developed



Gain Modules qualified for Space



CombSource Introduced



Prism Award for Super Raman Fiber Laser

2010



First Super Raman Pump and Cascaded ROPA Pump in an OPGW Network (CFE)

2RU Series introduced



Mission-Critical Customized Space-Qualified Amplifier design and manufacturing begins



DCI Series introduced



3-in-1 Versa Series introduced



High-Power PM Amplifier for Land-Satellite Communications



Clean Room & FBG Facility inaugurated



1st ROPA system - Communications Authority of Thailand (CAT)



MPBC was founded in 1976 as a spin-off of RCA Canada's Research and Development Laboratories. We entered the telecommunications market in the early 1990s when we developed and produced the undersea branching multiplexers for the trans-Atlantic cable TAT-9; the first trans-Atlantic optical fiber system between North America and Europe that provided undersea switching between its five landing points.

Today, MPBC is a leading supplier of innovative, high performance optical amplifier subsystems that extend the reach of optical fiber spans. Our patented Super Raman technology, based on a third-order pumping technique, is recognized throughout the industry as a key enabling technology that appreciably augments the distance and capacity of unrepeated systems.

More recently, we have moved our Telecommunications know-how from undersea to land - providing the longest reach on OPGW system, and now to space - with the commercial launch of amplifiers for satellite communications.

MPBC is headquartered in Montreal, Canada, where all development and manufacturing are conducted. We maintain our technological leadership by investing ~20% of our annual

revenues into research and development, in keeping with our R&D origins. We pride ourselves on providing our customers with unique and customized solutions and have through the years cultivated an international reach through a global customer base of blue-chip companies in the industrial, research, defense and telecommunications sectors.



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