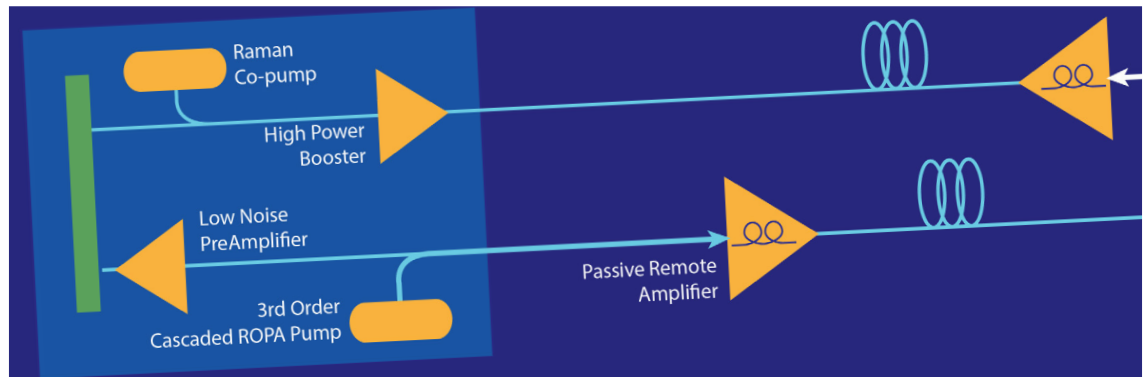


Network-Ready Telecom Solutions

1RU, 2RU & Versa2 Series



Mix & Match to optimize maximum system reach: MPBC's patented 3rd Order Super Raman & Cascaded ROPA Pumps, Conventional Raman and ROPA Pumps, Raman Co-Pumps, Boosters, Preamplifiers, Transponders

MPBC's telecommunications product family consists of the 2RU, Versa2 and 1RU series of equipment for optical link enhancement.

The equipment integrates easily with 3rd party equipment suppliers to extend the reach and/or capacity of fiber optic systems. With transmission subsystems, optical amplifiers and ROPA installations installed in systems throughout the world, MPB Communications is well-equipped to offer a powerful range of optical telecommunications products and services. The product family selected is based on the overall system reach, capacity, availability, and budget requirements of the overall network. Our network-ready solutions include:

Amplification

- Boosters with output powers up to 33 dBm (DWDM) which are used for post amplification before launching the signal into the link
- Preamplifiers which enhance effective receiver sensitivity with a near quantum-limit noise figure – one of the lowest in the industry
- Distributed Raman & Super Raman amplification with the best effective sensitivity improvement in the industry.

Wavelength Conversion

- Wavelength Converters to accommodate signals from 1310 to 1550 nm
- Transponders offering built-in FEC
- Available in bit rates ranging from E1 to STM-64/10G

Network Management

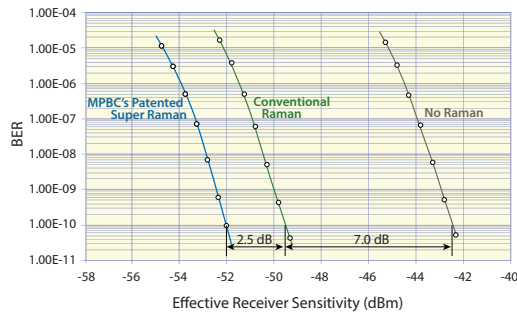
- Local and/or remote control and monitoring
- Easily configurable & user-friendly interface
- Webcraft access
- SNMP for integration with Network NMS

2RU Series

High Power amplification solutions for ultra-long DWDM networks

This reliable and flexible product family provide the perfect solution for long reach high capacity transport for point-to-point or multi-span (in-line) amplification.

- High-power amplifiers or Raman units in a fully managed compact shelf
- Integrates seamlessly with third-party transport equipment
- Increases span reach, distances prior to regeneration and/ or capacity for terrestrial and submarine network applications
- Provides the longest reach and lowest OSNR utilizing MPBC's patented 3rd order Raman and ROPA pumps



MPBC's Patented Super Raman Pump provides an extra 2.5 dB gain over conventional Raman amplification



- Raman Co-Pumps
- Distributed Raman Sources and Patented Super Raman Pumps
- ROPA Pump Sources
- Boosters

Applications

- Long reach optical
- Upgrading legacy fiber
- Upgrading DWDM channel counts
- Upgrading data rates

1RU Series

Flexible building blocks to provide cost-effective transport solutions for metro and long-haul repeaterless networks



- Raman Pumps
- Boosters
- Preamplifiers
- Wavelength Converters
- Wavelength Translators

Applications

- Back-haul, ultra-long-haul, long-haul, regional and metro access networks
- OPGW, terrestrial, submarine, oil and gas networks
- SCADA and telemetry transport
- Point-to-point or multi-span networks

MPBC has a series of high reliability 1RU equipment that can extend the reach of optical links by up to 500 km without the use of repeaters. Solutions can consist of a single Power Amplifier to a more complex combination including Low Noise Pre-Amplifier, Wavelength Converters, 3rd Order Raman Counter Pumping, Remote Optically Pumped Amplifier (ROPA) and Co-Pumping.

This is a summary brochure. Contact us for more detailed information on specific units. Specifications subject to change without notice.

VERSA2 Series

Compact, highly-configurable, integrated single box solution for long-reach, thin route networks



- Boosters
- Preamplifiers
- Wavelength Converters

Applications

- Back-Haul, Ultra-Long-Haul, Long-Haul, Regional and Metro access networks
- Utilities OPGW, Terrestrial, Submarine, Oil and Gas networks
- SCADA and Telemetry transport
- Point-to-point or multi-span networks

A single Versa2 box can support up to three independent units in one:

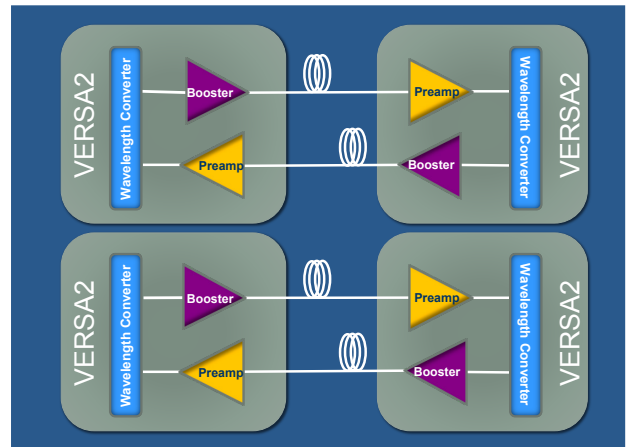
- **Power Amplifier** with saturated output powers of up to 21 dBm
- **Low-Noise Preamplifier** providing near quantum-limit noise figure
- **Wavelength Converter** which interface 1310 nm short-haul data transmission equipment to the 1550 nm region

The Versa2 can be used as a standalone, network-ready telecom solution or in seamless combination with the MPBC 2RU product family. The equipment integrates easily with 3rd party equipment suppliers to extend the capacity and/or reach of fiber optic systems up to 500 km without the use of repeaters.

The product selection can consist of a single amplifier or a combination of transport solutions, and is based on the overall system reach capacity, availability, and budget requirements of the network.

One or Two Box Solution

Suitable for 1+0, 1+1 or 2x (1+0) protected configuration with up to two integrated optical amplifiers



Versa2 Maximum Reach

Wavelength Converter + Booster + Preamplifier

	STM1	STM4	STM16 & 1GE	STM64 & 10GE	
<i>up to</i>	69 dB	65 dB	59 dB	59 dB	<i>reach</i>
<i>add...</i>					
Raman LDP500	+5 dB	+5 dB	+5 dB	+5 dB	<i>reach</i>
ROPA LDP500	+14 dB	+14 dB	+14 dB	+14 dB	<i>reach</i>

This is a summary brochure. Contact us for more detailed information on specific units. Specifications subject to change without notice.