

## UWDM™ PUSK™ System

### Ultra Long Reach DWDM System

*UWDM™ product line stretches the network for over 300km*

*without expensive line amplifiers or repeaters*

#### **Main Features:**

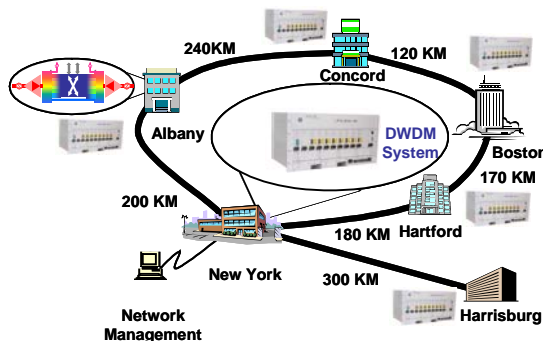
- ✓ **Compact and economical 6U rack mountable**
- ✓ **Long Reach: 200Km, 8 2.5G DWDM channels**
- ✓ **Ultra Long Reach: 300Km, 8 2.5G DWDM Channels (with Raman)**
- ✓ **Ultra Long Reach: 300Km, 4 10G DWDM**
- ✓ **Flexible network topology**
- ✓ **SNMP, WEB based network management via Fast Ethernet**



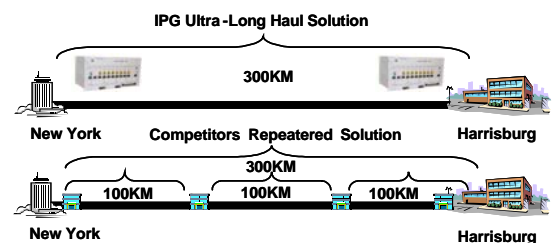
#### **Applications:**

- ✓ **Metro network backhaul**
- ✓ **Submarine and undersea networks**
- ✓ **CLEC, Utility, and Private Networks**
- ✓ **Single channel SONET/SDH, GbE and 10 GbE optical connection**
- ✓ **Optical port multiplexing**
- ✓ **Fiber relief / capacity overlay**

The UWDM™ family of products offers service providers and private network operators a simple, flexible, optical layer solution optimized for up to 8 channels ultra-long-haul un-repeated DWDM networks that can reach over 300km without any need for expensive line amplifiers or repeaters.



IPG UWDM System is a high performance platform created to reduce the network cost for metro and long haul networks. This solution, enabled by IPG's unique watt-class EDFAs and Raman pump fiber lasers, offers the service provider substantial reductions in capital and operational expenses incurred by other solutions' limited repeater-less span reaches of ~ 100km.



By integrating IPG's own superior RAMAN pump and EDFA technology The UWDM™ allows network operators to eliminate in-line amplifiers and repeaters up to 300km point-to-point connections, resulting in major network improvement:

- "Drastic reduction in Operational and maintenance cost,
- "Significant savings in total network Capital equipment cost,
- "Major improvement in network Reliability,
- "Real simplification in network Upgradeability; and
- "Elimination of remote Powering needs

## THE IPG UWDM™ System

The UWDM™ System is a compact, rack mountable 7" x 19" chassis designed for a full range of configurations. The same shelf is in-service upgradeable from up to 8 OC-48 to 4 OC-192 channels. These shelves can be cascaded to increase the traffic capacity up to 16 OC-192 channel capacity.

A customizable combination of up to 13 active or passive plug-in modules integrates key optical network building blocks into one complete and managed platform.

Asynchronous bit rates from 0.1 to 2.7 GB/s, GbE, 10GbE, and synchronous bit rates from OC-48 (2.5 GB/s) to OC-192 (10 GB/s) are supported. Network management functions are supported with a 100Mb/s optical supervisory channel. Management of the Equipment can be achieved via the Ethernet interface or the RS232 serial interface, utilizing SNMP and WEB based network management.

The UWDM system optimizes applications in long haul, regional and metro networks. Transmission lengths of more than 1500 km are achieved on standard fiber without the need of optical to electrical conversion. IPG UWDM is compatible with G.652, G.653, G.654 and G.655 fibers.

### PHYSICAL ATTRIBUTES

#### PARAMETER

Height x Width x Depth

Mounting Options

Density

Compliance

#### UNITS

265 mm x 465 mm x 310 mm / 10 in x 19 in x 12 in (without RAMAN)  
or 340 mm x 465 mm x 310 mm / 13 in x 19 in x 12 in (with RAMAN)

23 in or 19 in frames EIA or ANSI 1 in or 1.75 in centers

ETSI or 19 in cabinet

Desktop option

8 chassis per 7 ft EIA or ANSI style racks

Compliant with G.692 ITU-T telecommunication standard

### ENVIRONMENTAL SPECIFICATIONS

#### PARAMETER

Operating Temperature

Operating Humidity

Power

#### RANGE

-5°C to +65°C / +23°F to +149°F

5% to 80% non-condensing

Redundant -48 VDC feeds (-40 VDC to -60 VDC range)

110 VAC and 220 VAC

200 W typical power consumption (Fully Loaded)

### COMMON EQUIPMENT SPECIFICATIONS

#### SYSTEM CONTROL PROCESSOR

Craft Serial Port

Management Protocols

Alarm Reporting

SNMP and RS-232

Craft Ethernet Port

RJ-45 IEEE 802.3 Ethernet, 10/100

Mbps auto-sensing

Active and Fail status indicators (LEDs)

#### MANAGEMENT INTERFACES

RS232

SNMP

#### OFFICE ALARMS

Critical, major, minor remote alarms

Normally open, closed contacts

Visual and audible alarm, shelf LEDs



NOTE: Performance & size can be matched to the customers requirements. Contact IPG with your requirements.

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