

ABBREVIATIONS

ADC	Analogue to digital converters
AM	Amplitude Modulation
ASE	Amplified Spontaneous Emission
APON	ATM Passive Optical Network
ATM	Asynchronous Transfer Mode
AWG	Arrayed Waveguide Grating
BER	Bit Error Rate
BPON	Broadband Passive Optical Network
C-band	Conventional wavelength band
CE	Coexistence element
CD	Chromatic dispersion
CO	Central Office
CW	Continuous Wave
DBR	Distributed Bragg Reflector
DCF	Dispersion Compensation Fiber
DCM	Dispersion Compensation Module
DFB	Distributed Feedback
DML	Direct Modulated Laser
DSF	Dispersion Shifted Fiber
DWDM	Dense Wavelength Division Multiplexing
DWA	Dynamic Wavelength Allocation
EAM	Electro-Absorption Modulator
EML	External Modulated Laser
ECL	External Cavity Laser
EDFA	Erbium Doped Fiber Amplifier
EPON	Ethernet Passive Optical Network
ER	Extinction Ratio
FP	Fabry-Perot
FSAN	Full Service Access Network
FSR	Free Spectral Range
FTTH	Fiber To The Home
FWHM	Full Width at Half Maximum
FWM	Four Wave Mixing
GbE	Gigabit Ethernet
GPON	Gigabit Passive Optical Network
G-EPON	10 Gbit/s Ethernet Passive Optical Network
GVD	Group Velocity Dispersion
IEEE	Institute of Electrical and Electronics Engineers
IP	Internet Protocol
ISI	Inter-Symbol Interference
ITU	International Telecommunication Union
L-band	Long wavelength band
LiNbO ₃	Lithium Niobate

MEMS	Micro Electro-Mechanical System
MPN	Mode Partition Noise
MZ	Mach Zehnder
MZM	Mach Zehnder Modulator
NG-PON2	Second Generation Passive Optical Network
NLSE	Nonlinear Lineal Schrödinger Equation
NRZ	Non-Return-to-Zero
OADM	Optical Add Drop Multiplexer
OEO	Optical-to-Electrical-to-Optical
OLT	Optical Line Terminal
ONU	Optical Network Unit
ONT	Optical Network Terminal
OOK	On-Off Keying
OSA	Optical Spectrum Analyser
OSNR	Optical Signal to Noise Ratio
PC	Polarization Controller
PIC	Photonic Integrated Circuit
PLC	Planar Lightwave Circuits
PMD	Physical Media Dependent
PON	Passive Optical Network
PPG	Pulse Pattern Generator
PRBS	Pseudorandom Binary Sequence
PtMP	Point to Multipoint
PtP	Point to Point
QoS	Quality of Service
RF	Radio Frequency
RMS	Root-Mean-Squared
RZ	Return-to-Zero
RX	Receiver
SE	Spectral Efficiency
SMF	Single Mode Fiber
SMSR	Side Mode Suppression Ratio
SOA	Semiconductor Optical Amplifiers
TC	Transmission Convergence
TDM	Time Division Multiplexing
TEC	Thermo Electric Cooler
TL	Tunable Laser
TTX	Tunable Transmitter
TX	Transmitter
TWDM	Time & Wavelength Division Multiplexing
UDWDM	Ultra Dense Wavelength Division Multiplexing
VCSEL	Vertical Cavity Surface Emitting Lasers
VoIP	Voice over Internet Protocol
VPI	Virtual Photonics Incorporated
WDM	Wavelength Division Multiplexing
XG-PON	10-Gigabit Passive Optical Network