

## LIST OF ABBREVIATIONS

AOLS	All Optical Label Swapping
AON	All Optical Network
ASE	Amplified Spontaneous Emission
ASK	Amplitude Shift Keying
AWG	Arrayed Waveguide Grating
AWGN	Additive White Gaussian Noise
BER	Bit Error Rate
CD	Chromatic Dispersion
CDM	Code Division Multiplexing
CDMA	Code Division Multiple Access
DCF	Dispersion Compensating Fiber
DD	Direct Detection
DMUX	Demultiplexer
DPSK	Differential Phase Shift Keying
DQPSK	Differential Quadrature Phase Shift Keying
DS	Direct Sequence
DWDM	Dense Wavelength Division Multiplexing
EDFA	Erbium-Doped Fiber Amplifier
FBG	Fiber Bragg Grating
FPGA	Field Programmable Gate Array
FDL	Fiber Delay Line
FDM	Frequency Division Multiplexing
FDMA	Frequency Division Multiple Access
FSK	Frequency Shift Keying
FTTH	Fiber-to-the-Home

FWM	Four-Wave Mixing
GE-PON	Gigabit Ethernet-Passive Optical Network
GSG	Gate Signal Generator
HFC	Hybrid Fiber Coax
IL	Inbound Link
IM-DD	Intensity Modulation-Direct Detection
IP	Internet Protocol
ISI	Inter Symbol Interference
ITU	International Telecommunication Union
IWU	Internetworking Unit
LAN	Local Area Network
LD	Laser Diode
LED	Light-Emitting Diode
LiNbO <sub>3</sub>	Lithium Niobate
LO	Local Oscillator
LPF	Low Pass Filter
MAC	Medium Access Control
MAI	Multiple Access Interference
MAN	Metropolitan Area Network
MDW	Modified Double Weight
MFH	Modified Frequency Hopping
MLL	Mode Locked Loop
MOD	Modulator
MPLS	Multi-Protocol Label Switching
MUI	Multi-User Interference
MUX	Multiplexer

MZM	Mach-Zehnder Modulator
MZI	Mach-Zehnder Interferometer
NDSF	Non-Dispersion Shifted Fiber
NOLM	Non-Linear Optical Loop Mirror
NRZ	Non-Return-to-Zero
NZ-DSF	Non-Zero Dispersion Shifted Fiber
OADM	Optical Add Drop Multiplexer
OBN	Optical Beat Noise
OC	Optical Code
OCDMA	Optical Code Division Multiple Access
O/E	Optical/Electrical
OL	Outbound Link
OOK	On-Off-Keying
OOC	Optical Orthogonal Codes
OPS	Optical Packet Switch
OPSR	Optical Packet Switching Router
OXC	Optical Cross Connect
PIN	Positive-Intrinsic-Negative
PIIN	Phase Induced Intensity Noise
PLC	Planar Light-Wave Circuit
PLP	Packet Loss Probability
PLR	Packet Loss Ratio
PMD	Polarization Mode Dispersion
PON	Passive Optical Network
PRBS	Pseudo Random Binary Sequence
QoS	Quality of Service

RAM	Random Access Memory
RIN	Relative Intensity Noise
RZ	Return-to-Zero
RF	Radio Frequency
RX	Receiver
SA	Source Address
SEP	Symbol Error Probability
SMF	Single Mode Fiber
SNR	Signal-to-Noise Ratio
SOA	Semiconductor Optical Amplifier
SPM	Self-Phase Modulation
SS	Spread Spectrum
SSFBG	Super Structured Fiber Bragg Grating
TDM	Time Division Multiplexing
TDMA	Time Division Multiple Access
TE	Terminal Equipment
TFF	Thin Film Filter
TMN	Telecommunication Management Network
TOAD	Terahertz Optical Asymmetric Demultiplexer
TOWC	Tunable Optical Wavelength Converter
TX	Transmitter
WAN	Wide Area Network
WDM	Wavelength Division Multiplexing
WDMA	Wavelength Division Multiple Access
XPM	Cross-Phase Modulation