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### **List of Acronyms**

**AGC** Automatic gain control

**AO** Acoustooptic modulator

**ASE** Amplified spontaneous emission

**C** Circulator

**C-band** Conventional band

**EDF** Erbium doped fiber

**EDFA** Erbium doped fiber amplifier

**FBG** Fiber Bragg grating

ISO Optical isolator

L-band Long-wavelength band

**LD** Laser diode

**NF** Noise figure

OADM Optical add drop multiplexers

OC Optical circulator

**OSA** Optical spectrum analyzer

**SHB** Spectral hole burning

**SNR** Signal-to-noise ratio

**SSE** Source spontaneous emission

**TBPF** Tunable band pass filter

**VOA** Variable optical attenuator

**WDM** Wavelength division multiplexing