



NEW

Photline was created in September 2000 as a spin-off from the Optics Laboratory of the University of Besançon, one of the premier research centers for integrated optics and opto-electronics in France. Thanks to its origins, the company has inherited unique technological foundations resulting from more than 15 years of research work completed at the University. Photline's Intellectual Property consists of a number of key patents on LiNbO3 technology.

In June 2008, the acquisition of AdLightec brought to Photline an enlarged technology platform, adding high-speed electronics and microwave expertise to the historical integrated optics know-how. The combination of optical and electronics technologies steers Photline in a key position to offer innovative solutions with global design to the market.

Intensity Modulators

MX-LN

The MX-LN series of intensity modulators is a complete family of high performance modulators designed for integration in systems and modules at 10 Gb/s, 20 Gb/s or 40 Gb/s. These modulators are built with titanium in-diffused lithium niobate waveguides that offer long-term stability and temperature independent performance. The MX-LN series boasts a chirp-free x-cut design which makes these modulators ideal for long and ultra-long haul transmission. Whether for point to point or for Dense Wavelength Division Multiplexing (DWDM) optical transmissions, these modulators operate equally well with return to zero (RZ) or non return to zero (NRZ) modulation formats.

	E.O. bandwidth (GHz)	V_{π} RF@50 kHz	Typical IL
MX-LN-10	> 12 GHz	5.1 V	3' dB
MX-LN-20	> 18 GHz	5.1 V	3' dB
MX-LN-40	> 28 GHz	< 6 V	3' dB

* Very low insertion Loss < 2.5 dB on request.

Features:

- 1300 nm, 1550 nm
- 10 Gbps, 20 Gbps, 40 Gbps

Applications:

- Digital transmission
- Telecommunication

MXAN-LN

The MXAN-LN series are high performance intensity modulators designed for analog fiber optic links and high bandwidth analog applications operating at frequencies up to 20 GHz. MXAN-LN's performance parameters meet the requirements of today's most demanding analog transmission links for military and civil applications. They are specially suitable for microwave links and antenna remoting.

	E.O. bandwidth (GHz)	V_{π} RF@50 kHz	Typical IL
MXAN-LN-10	> 12 GHz	5.1 V	3' dB
MXAN-LN-20	> 18 GHz	5.1 V	3' dB

* Very low insertion Loss < 2.5 dB on request.

Features:

- 1310nm, 1550nm
- DC up to 20 GHz

Applications:

- RF over fiber
- Defense, Aerospace

