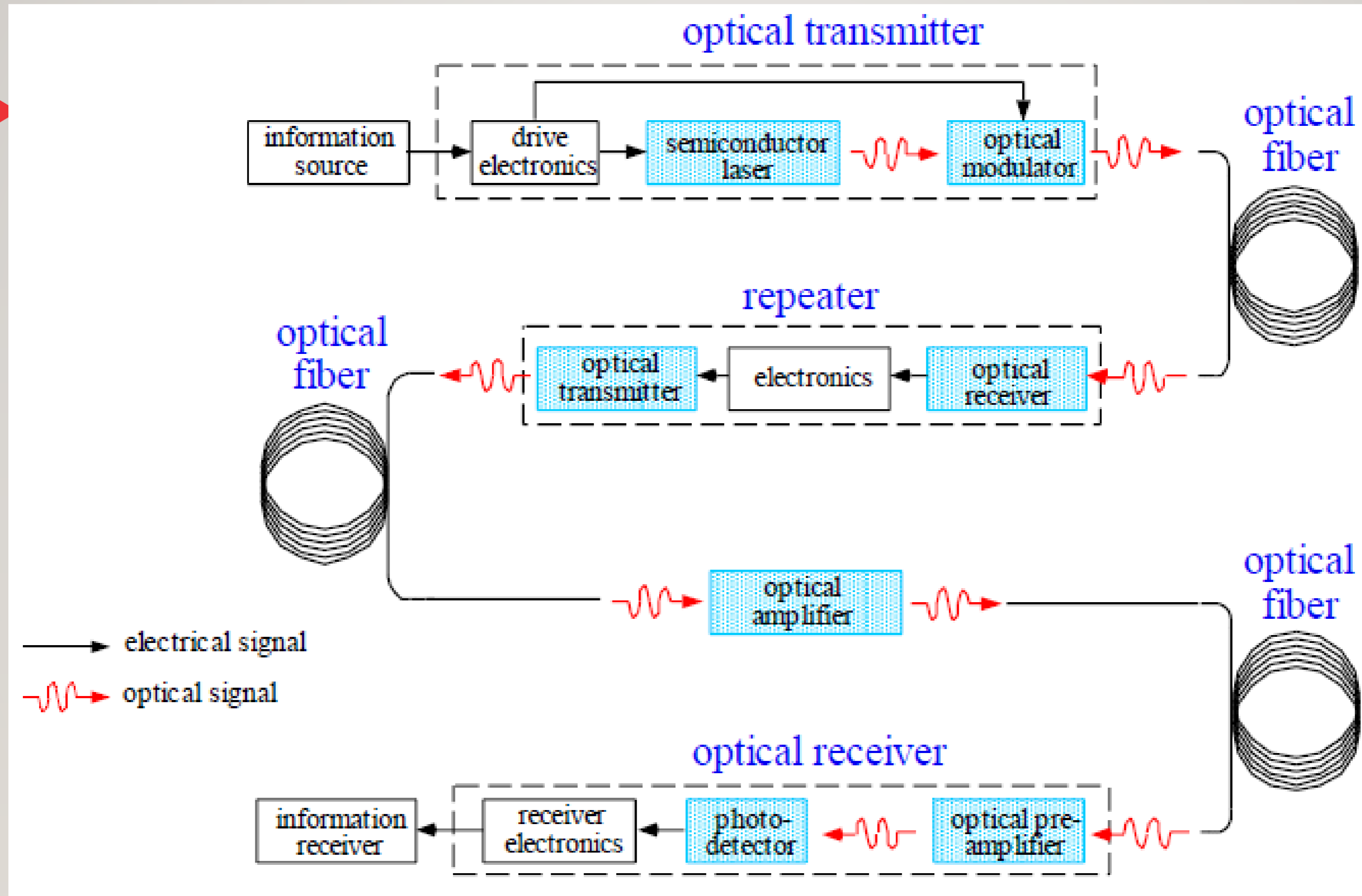


SISTEM KOMUNIKASI OPTIK

- **BAB 1**
 - **SISTEM TRANSMITTER**
 - **KOMUNIKASI SERAT OPTIK**
- D3 Teknik Telekomunikasi – Fakultas Ilmu Terapan



SISTEM JARINGAN KOMUNIKASI SERAT OPTIK

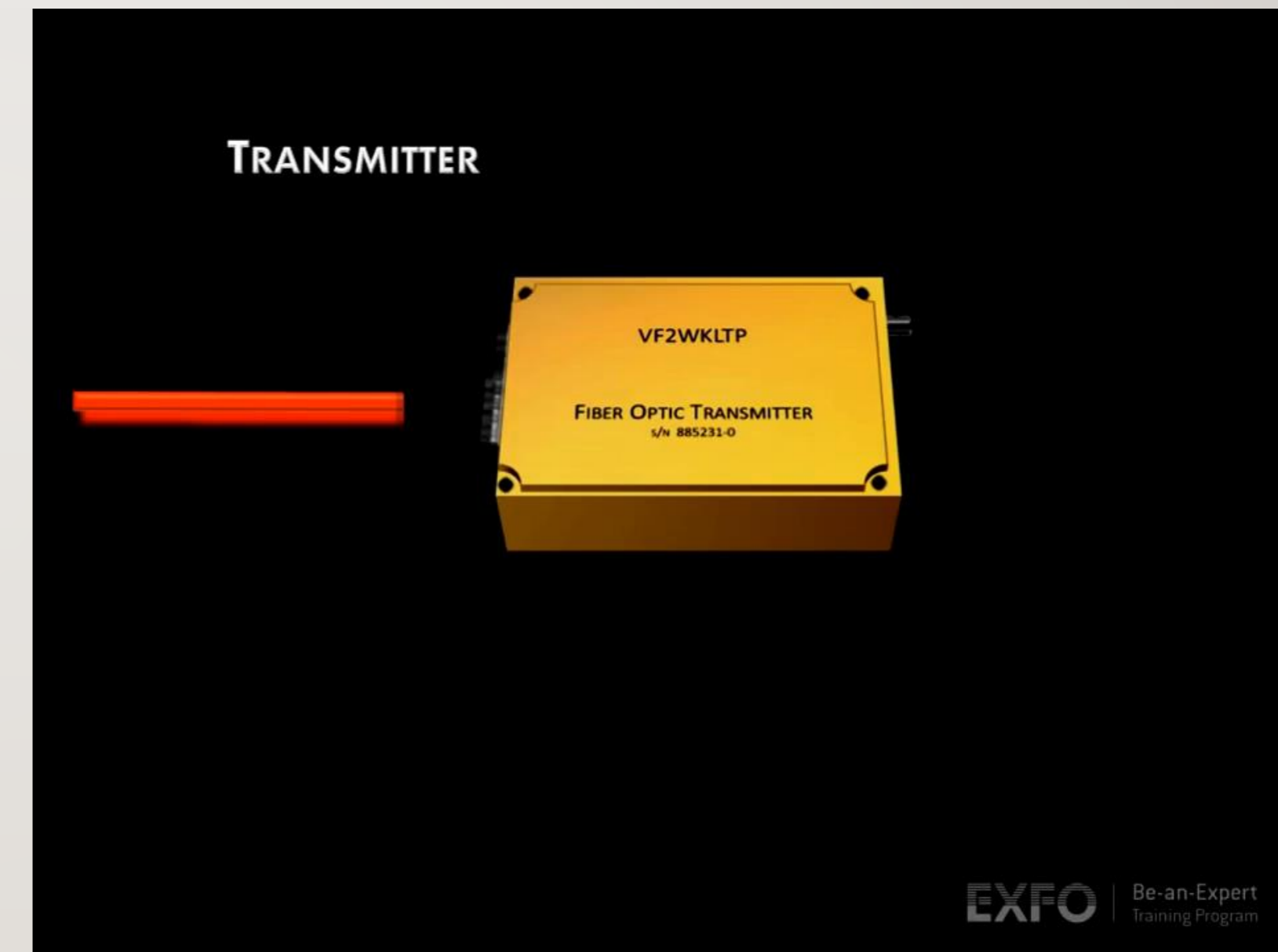


TRANSMITTER KOMUNIKASI SERAT OPTIK

3

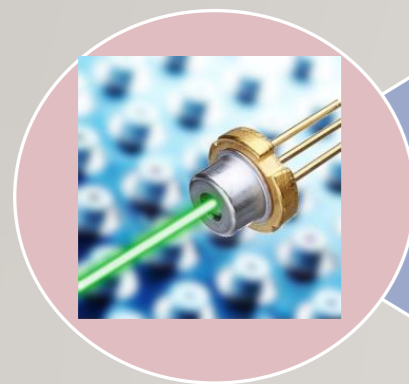
FUNGSI TRANSMITTER :

- ❑ Transmitter optik berfungsi merubah sinyal listrik menjadi sinyal optik
- ❑ Meneruskan sinyal optik yang dihasilkan ke serat optik



TRANSMITTER KOMUNIKASI SERAT OPTIK

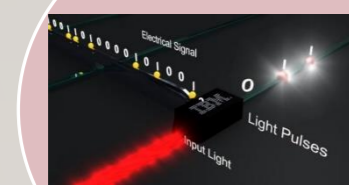
TRANSMITTER OPTIK TERDIRI DARI :



Sumber Cahaya Optik

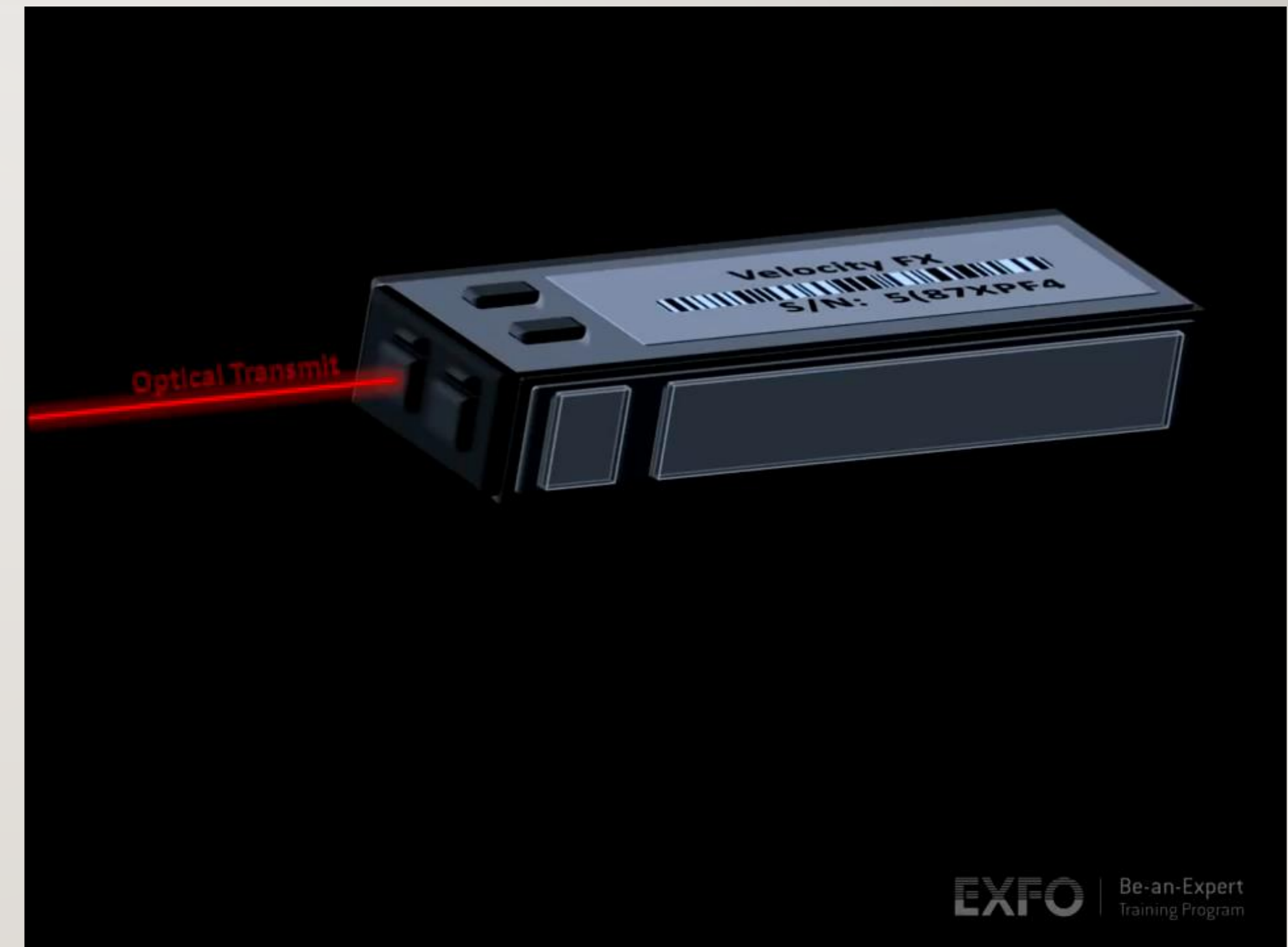


Electrical Pulse Generator



Optical Modulator

TRANSCEIVER OPTIK :

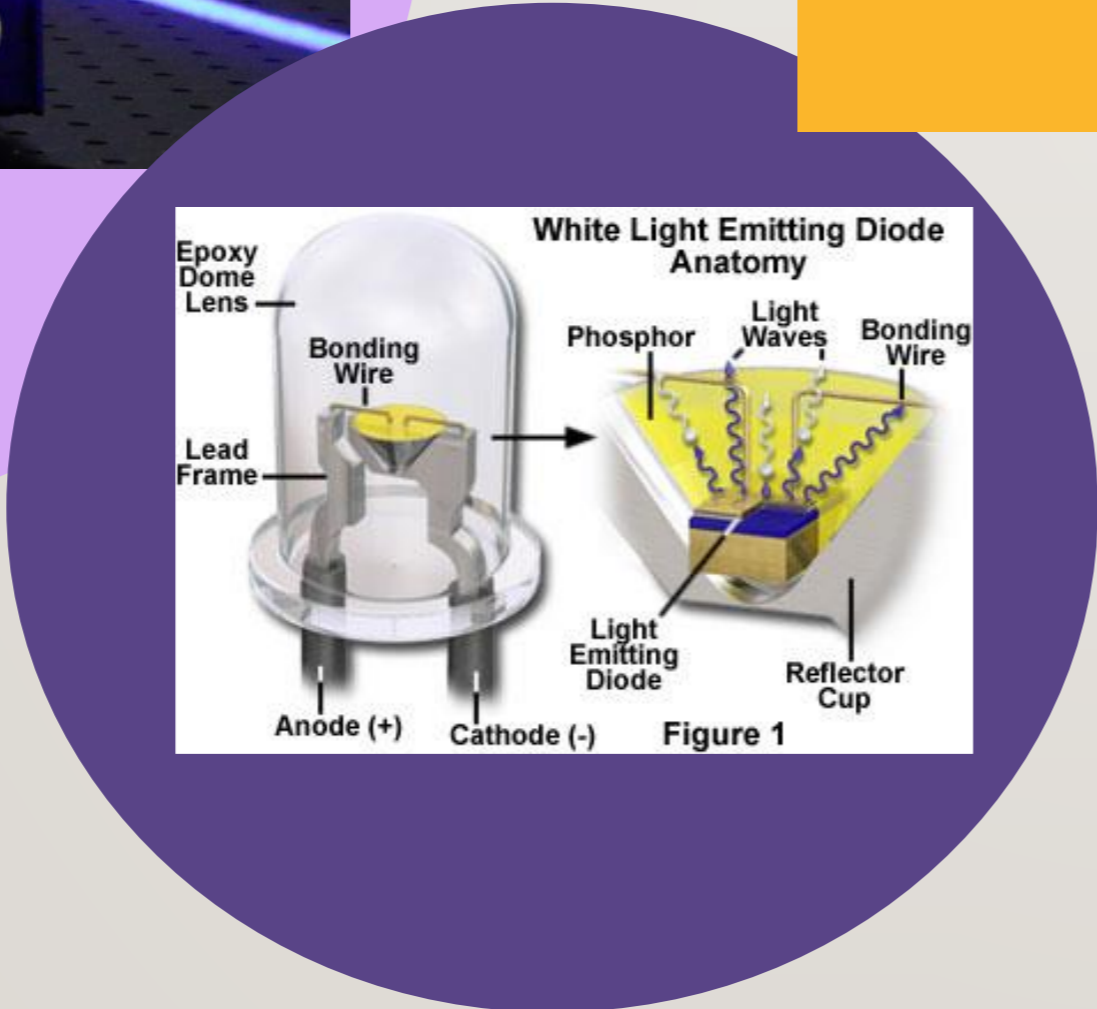


EXFO | Be-an-Expert Training Program

SUMBER CAHAYA OPTIK



**MENGAPA LASER DAN LED COCOK
UNTUK SUMBER CAHAYA
KOMUNIKASI OPTIK**



Sumber Referensi: <https://www.civillaser.com/news/470nm-1000mw-semiconductor-laser-video-1239/>

<https://micro.magnet.fsu.edu/primer/lightandcolor/ledsintro.html>

Gerd, Keiser. 2010, Optical Serat Communications, 4th edition, McGraw Hill, International Edition

SUMBER CAHAYA OPTIK

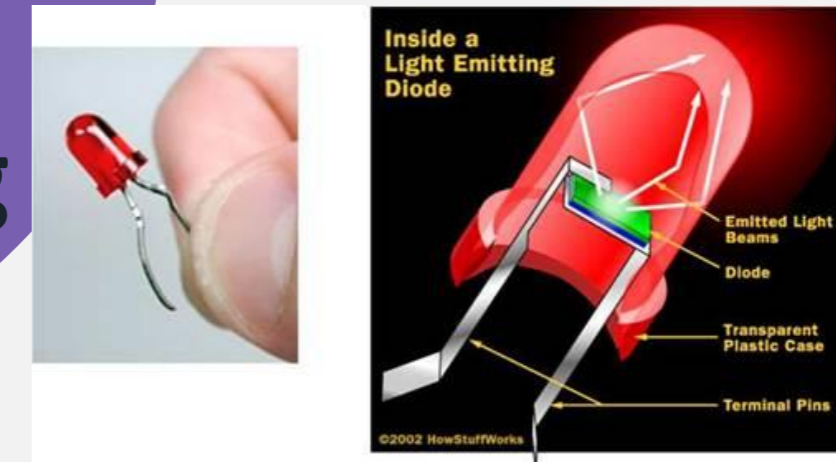
6

LASER



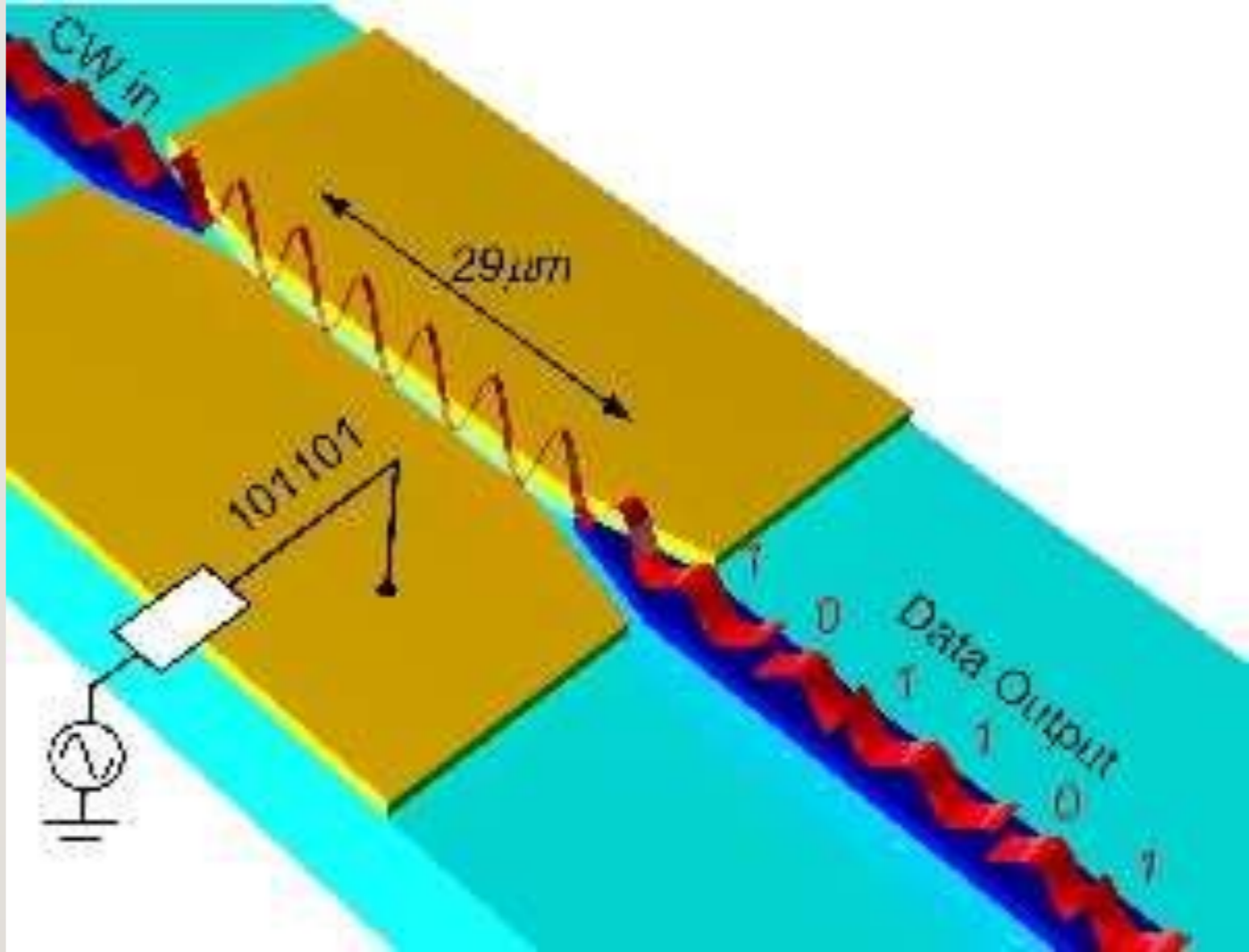
- Keluaran cahaya Coherent
- Komunikasi Singlemode dan Multimode Fiber
- Komunikasi Jarak Jauh
- Kecepatan Data Tinggi
- Harga Mahal

LED (Light Emitting Diode)



- Keluaran cahaya Incoherent
- Komunikasi Multimode Fiber
- Komunikasi Jarak Pendek
- Kecepatan Data Rendah
- Harga Murah

Electrical Pulse Generator





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