

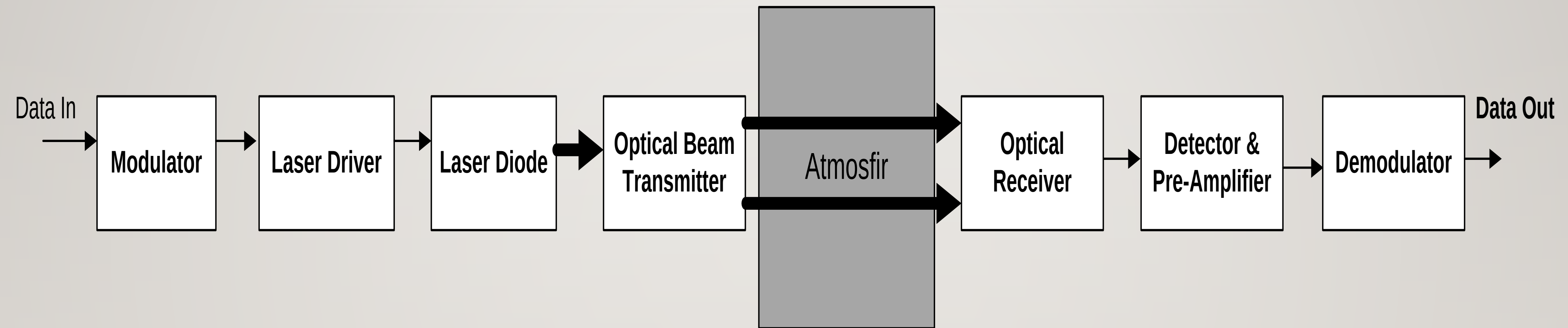
SISTEM KOMUNIKASI OPTIK

- **MATERI 14**
- **BLOK SISTEM KOMUNIKASI FSO**

- D3 Teknologi Telekomunikasi – Fakultas Ilmu Terapan

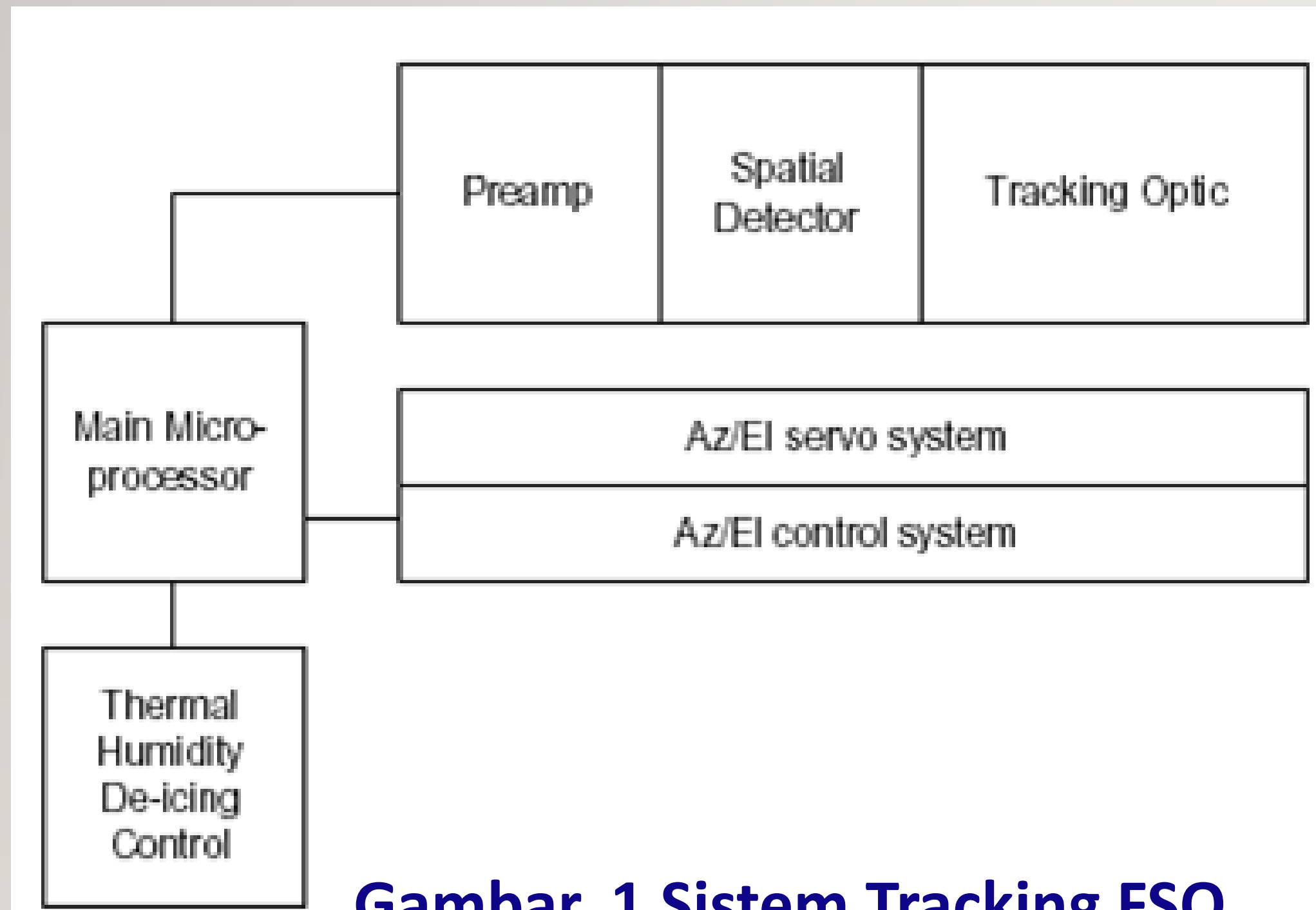


BLOK SISTEM KOMUNIKASI FSO



Blok Diagram Sistem Dasar Komunikasi FSO.

SISTEM TRACKING KOMUNIKASI FSO



Gambar. 1 Sistem Tracking FSO



Gambar. 2. Transmitter dan Receiver FSO

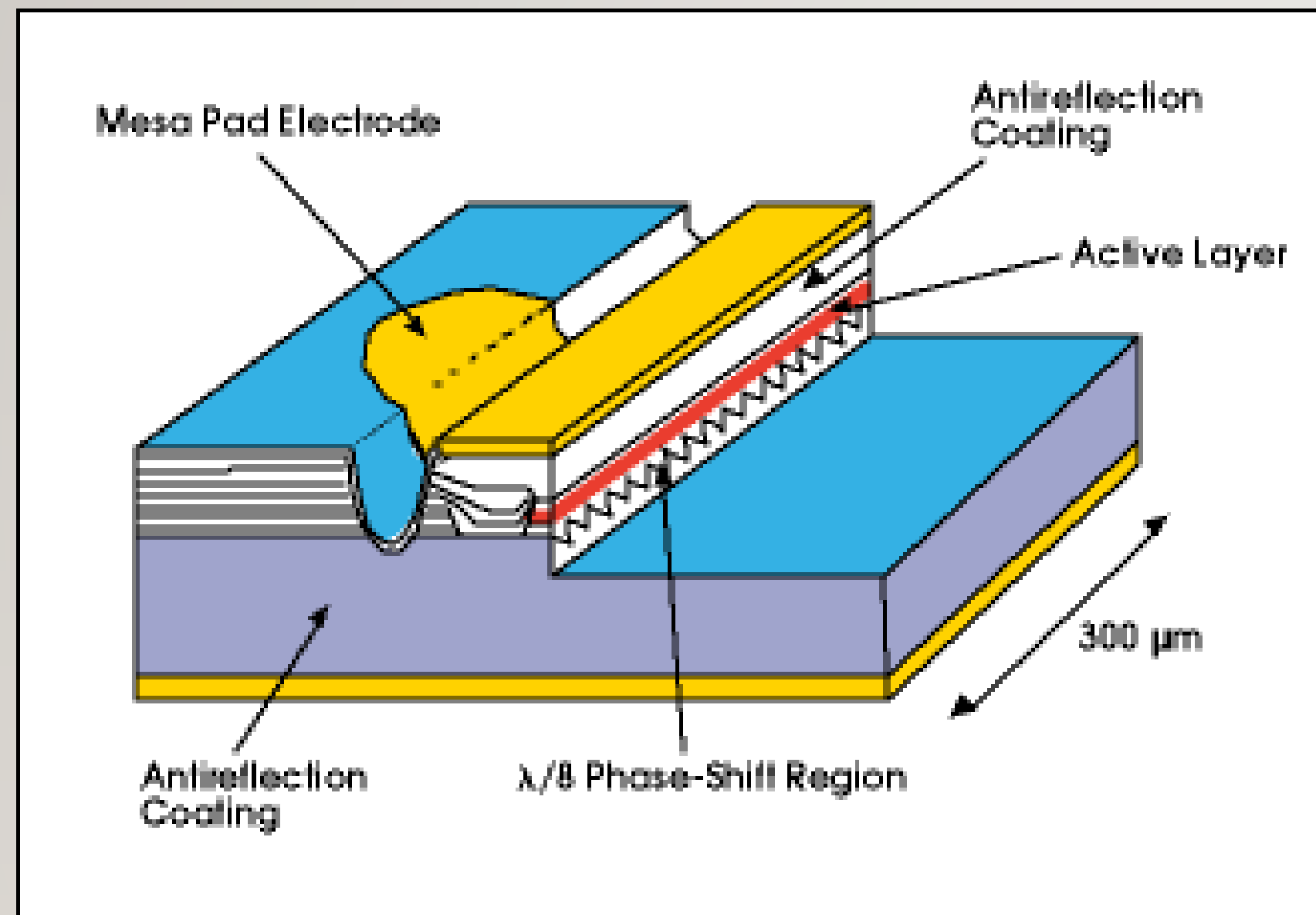
TRANSMITTER FSO



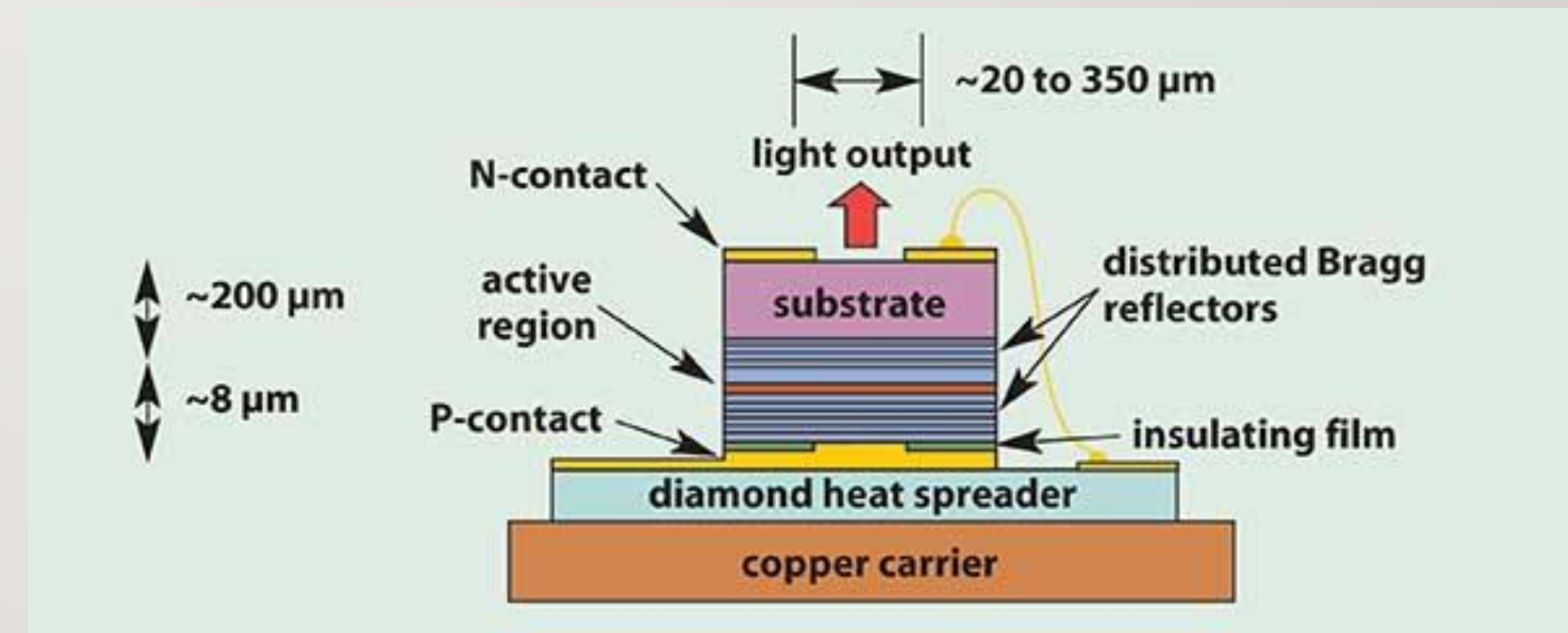
Karakteristik Laser Semikonduktor:

1. Berkas cahaya Gaussian dan koheren
2. Spektrumnya bersifat monokromatis
3. Intensitas cahaya yang tinggi $> 5\text{mW}$
4. Modulasi langsung hingga orde puluhan gigabyte/s
5. Sumber cahaya yang terintegrasi dengan sistem modulasi secara optik yakni *absorption optical modulator* (AOM)

TRANSMITTER FSO

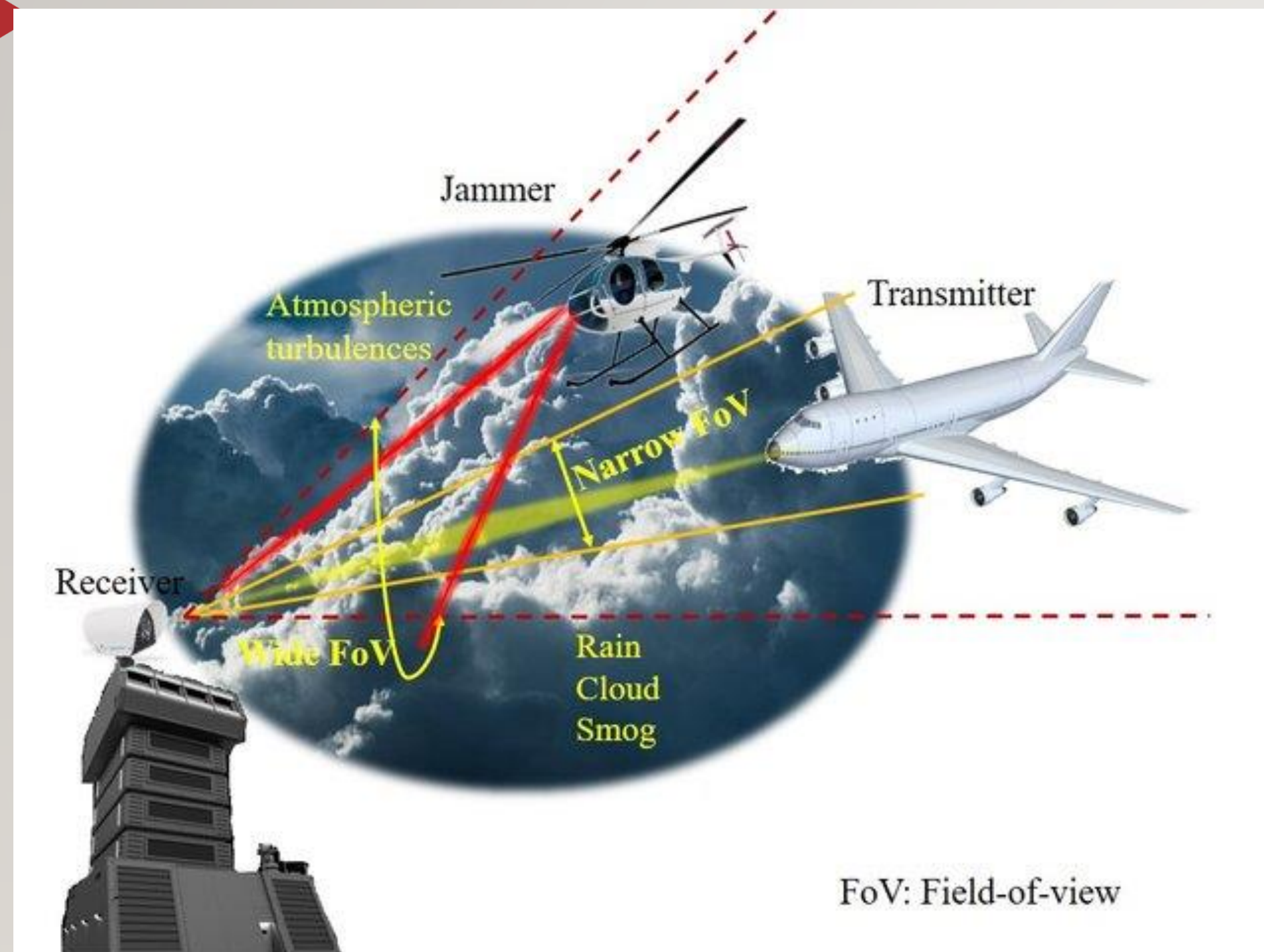


Laser DFB (*Disributed Feedback*)



VCSEL (*Vertical Cavity Surface Emitting Laser*)

RECEIVER FSO



Karakteristik Detektor Cahaya :

1. Responsifitas panjang gelombang
2. Sensitifitas
3. Gain
4. Quantum efisiensi
5. *Noise figure*

TERIMA KASIH



UNITED STATES OFFICE

1243 Barker Cypress
San Francisco, California



EUROPE OFFICE

13 Ave. Ballarta
Barcelona, Spain



SOUTH AMERICA OFFICE

45 Calle Norte
Argentina