<Preliminary>

New Release!!!

Passive Component Analyzer (PCA)

Fiber Optic Component Measurements for insertion loss as a function of polarization and wavelength from 1310nm to 1620 nm

FIBERPRO's Passive Component Analyzer (PCA) is designed to analyze loss characteristics of Multi-channel Optical Fiber Components. Working with external Tunable Laser, FIBERPRO's PCA can measure Polarization Dependent Loss (PDL) and Insertion Loss(IL) at the same time at minimum time.

As an extended model of FIBERPRO's PDL meter, PL2000, PCA has the following features.

1. Most suitable for characterizing 1 X N Fiber Optics Components, such as AWG or Splitter, etc.
2. Wavelength swept measurement is possible by working with external Tunable Laser Source
3. Very high measurement speed.
4. High accuracy in PDL & IL measurement (same as PL2000).
5. Affordable price

Configurations

The PCA could be configured with following three elemental components.

1. **Main Frame**

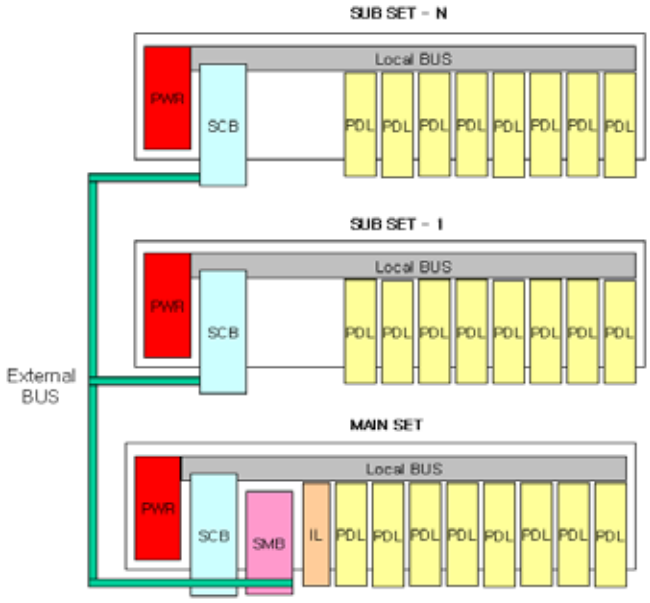
   The main frame of full –rack, 3U standard size functions all the PCA functions. The maximum channel capability is 16 channels for the main frame. Each module can support 2 channels.

2. **Sub frame**

   If more than 16 channels are required, sub frames can be extended with the main frame. Each sub frame can be equipped with 14 modules.

3. **Module**

   When the frame is plugged with modules, the PCA can do its function. Each module has 2 channels of optical receiver. The total number of modules could be increased later, if necessary.



- **MAIN SET** : Main System Set with PDL Client B/D and IL Client B/D, GPIB
- **SUB SET** : Sub System Set with PDL Client B/D
- **SMB** : System Main B/D with GPIB
- **SCB** : Set Control B/D (Gathering PDL/IL Result, Control Clients)
- **PDL** : PDL Client B/D
- **IL** : IL Client B/D
- **PWR** : Power B/D
- **Local BUS** : The Bus for Commands, Data, and Synchronized Clock
- **External BUS** : The Bus between MAIN SET and SUB SETs

Advantages

- ✓ Based on all state method (Recommended method of TIA/EIA-455-157)
- ✓ Using a priority fast polarization scrambler
- ✓ No frequent calibration process unlike Muller matrix method
- ✓ With only one wavelength scan for PDL and IL measurement simultaneously
- ✓ Not sensitive to a fiber lead movement
- ✓ With any external laser providing wavelength information
- ✓ Measures devices with up to 128 channels
- ✓ Powerful tool for production and R&D applications
- ✓ Cost effective configuration

Specifications

Operation Wavelength Range

-PDL : 1310 ~ 1620 nm

-IL : 1520 ~ 1620 nm (Between 1310nm and 1520nm, 20 different wavelengths could be specified by a customer)

PDL/IL Measurements

-PDL Accuracy : +/-(0.01+5% of PDL) dB maximum

-IL accuracy : +/-(0.1+0.5% of IL) dB maximum

-PDL/IL Measurement speed : 0.01 sec at one wavelength

-PDL range : 0 to 5 dB

-IL range : 55dB

Power Measurements

-Power Accuracy : +/-(0.2+2% of Power in dBm) dB maximum

-Power Range : +3dBm to -57 dBm

Operation Temperature **: 10℃~40℃**