

## **Tunable Dispersion Compensation Card**

TDC (tunable dispersion compensator) card launched by NewNets is mainly used for dispersion compensation of high- speed transmission system. It can accurately manage the residual dispersion after segmented fixed optical compensation, and provide flexible and accurate solution for dispersion compensation. The product is independent, transparent, safe and reliable for optical transmission signals, so as to ensure normal communication of the system. It is suitable for high-speed, long-distance WDM transmission system

## **Product diagram**



## **Product features**

- Adjustable: TDC provide high precision, dynamically adjustable dispersion compensation over a wide range of dispersion value.
- Low latency: TDC latency is less than 25ns, making it ideal for time-sensitive networks
- G.652 slope matching: TDC compensates for the dispersion slope of the fiber, providing accurate and uniform residual dispersion for each channel of the C-band
- Multi-channel: TDC has a complete C-band coverage and can be used on 50GHz or 100GHz DWDM networks.
- Dispersion compensation range is large, and it can be selected from ±800ps/nm to ±1200ps/nm
- Optical path is transparent and does not change the optical signal
- Simple structure and convenient maintenance



## **Product specification**

| Function                      | Note   |            |
|-------------------------------|--|------------|
| Working wavelength range      | C band: 1528nm~1568nm  |            |
| Channel spacing               | 50-100GHz  |            |
| Dispersion compensation range | ±800ps/nm  | ±1200ps/nm |
| Absolute dispersion accuracy  | ±25ps/nm   | ±60s/nm    |
| Introduction loss             | <4dB   |            |
| PDL                           | <0.3dB   |            |
| PMD                           | <1ps   |            |
| Max input optical power       | +27dBm   |            |
| Dispersion setting resolution | ±10ps/nm   |            |
| Button and display function   | Support local button operation dispersion compensation range setting, with the display can visually display the current status |            |
| Network management function   | Support real-time monitoring of TDC optical power, remote setting of dispersion compensation range, etc.                       |            |
| Optical interface             | LC/UPC   |            |
| Max power consumption         | 5W   |            |
| МТВҒ                          | >100000 hours  |            |