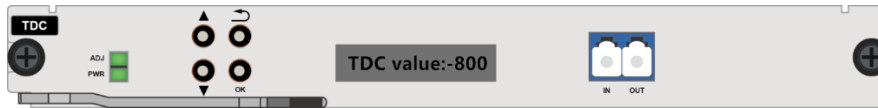


TDC: Tunable Dispersion Compensation Unit

The TDC (tunable dispersion compensator) card launched by Sintai Communications is mainly used for dispersion compensation of high-speed transmission system, can accurately manage the residual dispersion after segmented fixed optical compensation, and provide flexible and accurate solution for dispersion compensation. It's 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 Features

- Adjustable: provides highly accurate, dynamically adjustable dispersion compensation over a wide range of dispersion values.
- Low Latency: TDC's latency is less than 25ns, making it ideal for time-sensitive networks.
- Multi-channel: TDC has full C-band coverage and can be used on 50GHz or 100GHz DWDM networks.
- Large dispersion compensation range, supporting $\pm 1400\text{ps/nm}$.
- Optical path is transparent and does not change the optical signal.
- Simple structure and easy maintenance.

Product Specification

Function	Note
Working wavelength range	C band: 1528nm~1568nm
Channel spacing	50GHz or 100GHz optional
Dispersion compensation range	$\pm 1400\text{ps/nm}$
Absolute dispersion accuracy	$\pm 25\text{ps/nm}$ ($\leq 700\text{ps/nm}$) ; $\pm 60\text{ps/nm}$ ($\leq 1200\text{ps/nm}$)
Introduction loss	$< 5.5\text{dB}$
PDL	$< 0.2\text{dB}$
PMD	$< 1\text{ps}$
Max input optical power	+27dBm
Module warm-up time	$< 180\text{s}$
Dispersion setting resolution	$\pm 10\text{ps/nm}$
Dispersion response time	$< 20\text{s}$
Button and display function	Support local key operation dispersion compensation range setting, with the display can intuitively display the current status
Network management function	Support TDC dispersion compensation range remote setting and other functions
Occupied slot number	Support OTNS8600 series chassis, occupy 1slot
Optical interface	LC/UPC
Max power consumption	10W
MTBF	> 100000 hours