

## **FWT-1550DT Series 1550 nm Advanced Type Directly Modulated Optical Transmitters**



### **1. Product Description**

FWT-1550DT series of advanced 1550nm directly modulated optical transmitter, is mainly used in overlay insert systems to implement high-value and multi-functional local designed value-added services such as self-run programs. Low chirp, the output is the ITU standard wavelength, the RF driver adopts a self-developed RF predistortion circuit and a built-in perfect microcomputer automatic monitoring system to ensure the excellent performance index of the device.

FWT-1550DT series of advanced 1550nm directly modulated optical transmitter, suitable for 10 ~ 25 kilometers long distance transmission.

### **2. Product feature**

- ◆ Top quality: The low chirp, high linearity AOI DFB laser, and RF pre-correction circuit are used to keep the C / CTB, C / CSO, and C / N indexes in the best state.
- ◆ Transmission range: 0 ~30 kilometers for short distance transmission.
- ◆ Reliability: 19" 1U standard rack, built-in high-performance 1 + 1 hot backup power supply, which can work at 86 ~ 265Vac city network. MS automatic switching, and chassis temperature automatic control. **Chassis depth is only 265mm.**
- ◆ Excellent performance-price ratio: suitable for FTTH triple play CATV from headend to end user.
- ◆ Intuitive: The laser is the most expensive component of the device. The built-in microprocessor software monitors the working status of the laser, and the working parameters are displayed on the panel LCD.
- ◆ Network management type: SNMP network management, can realize the network management WEB monitoring function.
- ◆ **SNMP Support V1 & V2, support both IPv4 and IPv6.**
- ◆ Can be customized 2 outputs, optical power 5 ~ 6.5dBm output.

### 3. Technical Parameters

| Item                         | Unit | Performance Parameter             | Note                            |
|------------------------------|------|-----------------------------------|---------------------------------|
| Laser Model                  |      | DFB                               | ORTEL                           |
| Wavelength                   | nm   | 1550±10                           |                                 |
| Optical Modulation Method    |      | Directly Modulated                |                                 |
| Optical Output Power         | mW   | 7~10                              |                                 |
| Channel Number (Analog)      | N    | 59                                |                                 |
| Optical Connector            |      | FC/APC or SC/APC                  | Specified Before Ordering       |
| Frequency Range              | MHz  | 47~750 (862)                      |                                 |
| CNR                          | dB   | ≥52.0                             |                                 |
| Flatness                     | dB   | ±0.83                             |                                 |
| RF Input Signal Level        | dBuV | 78±5                              |                                 |
| C/CTB                        | dB   | ≥65.0                             |                                 |
| C/CSO                        | dB   | ≥65.0                             |                                 |
| RF Input Impedance           | Ω    | 75                                |                                 |
| RF Input Reflection Loss     | dB   | >16(47~550)MHz<br>>14(550~862)MHz |                                 |
| Power Supply                 | V    | 90~265VAC or 48VDC                |                                 |
| Power Consumption            | W    | ≤50                               | Hot-pluggable Dual Power Supply |
| Working Temperature          | ℃    | 0~50                              | Automatic Temperature Control   |
| Storage Temperature          | ℃    | -20~85                            |                                 |
| Operating Relative Humidity  | %    | 20%~85%                           |                                 |
| Dimension                    | mm   | 435*265*45                        | (W) x (D) x (H)                 |
| Network Management Interface |      | RJ45                              | Supporting Web Browser and SNMP |

### 4. Products model series

FWT-1550DT -1X7 (1 way output power, ≥ 7dBm)

FWT-1550DT -1X8 (1 way output power, ≥ 8dBm)

FWT-1550DT -1X9 (1 way output power, ≥ 9dBm)

FWT-1550DT -1X10 (1 way output power, ≥ 10dBm)

FWT-1550DT -2X6.5 (2 ways output power, ≥ 6.5dBm)

