# SUNNISKY 1310AMLT Optical Transmitter

SUNNISKY 1310AMLT optical transmitter consists of Intelligent 1 RU Chassis and optical transmitter module. 1 RU chassis has the features of LCD display, thin film switch, and a vivid color with elegant and modern content.
This intelligent standard 19" 1RU chassis can be monitored by the network management software (Optional), even though when there is no transmitter module plugged into the chassis, the network management also can get clear status of all available slots in this intelligent chassis. Its optical transmitter module, and the other modules such as forward optical receiver, reverse optical receiver, and etc., also can be plugged into it, which offers two respectively independent module slots.
Its optical transmitter module has 11 output optical powers, including 2 or 4 or 6 or 8 or 10 or 12 or 13 or 14 or 16 or 18 or 20mW.The kernel component of optical transmitter module adopts an isolated Distributed Feedback (DFB) laser, which represents the latest technology. Its high cost-effective and wonderful performance are highlighted by its advanced multipoint pre-distortion correction circuit, RF pre-amplifier circuit, high reliability of power supply, intelligent and high efficient network management, and high level design.

Optical transmission Module

**Feature**

- 860MHz bandwidth
- High-performance DFB laser to increase the signal quality in HFC
- Low noise, low distortion and pre-amplifier module to meet low RF input signal
- Integrated circuit design built with RF amplifier and VCA, and the advanced circuit of multi-point pre-distortion correction could enhance its performance and specification
- Separate CPU control board in each OTX module to support effective control and multi-protection function
- Efficient RF overdrive protection for LD, alarm warning for low optical power output and automatic LD shutdown
- Efficient ATC(Automatic Temperature Control) and APC(Automatic Power Control) assure precise optical power level
- Efficient AGC (Automatic Gain Control) could ensure the laser tube to obtain stable RF level
- Field MGC (Manual Gain Control) could suit for different HFC transmitter network in order to optimize optical link system and variable modulation depth (RF drive level)
- Front panel -20dB RF test port
- RS232/485 and RJ45 Ethernet interfaces, SNMP/Telnet /Web IE network protocol can be used to realize local or remote status monitor and control
- Advanced high efficiency switch power supply to meet the AC voltage wide fluctuating (176V~264V); redundant switch power supply and automatic alternation
- Module position swap freely and support hot plug-in and pull-out
- Reliable thermal structure design could ensure high stability and long time operating life

**Specification**

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| Type of laser | DFB |
| Wavelength | 1310±20nm |
| Modulation mode | Direct Light Intensity Modulation |
| Output Optical Power | 4, 6 ,8 ,10, 13, 16mW |
| Fiber Connector | FC/APC |
| Frequency Range | 47~870MHz |
| Input RF Signal Level | 80±3dBμV |
| CNR | ≥52dB (Typical) |
| CTB | ≤-67dB (Typical) |
| CSO | ≤-62dB (Typical) |
| Flatness | ±0.75dB |
| RF Input Impedance | 75Ω |
| RF Input Return Loss | ≤-16dB (47~550MHz) |
| | ≤-14dB (551~870MHz) |
| APC Control Precision | ≤±0.1 dB |
| ATC Control Precision | 25±1℃ |
| Max TEC Operating current | DC+5V@850mA;DC-5V@850mA |
| MTBF | ≥40000h |
| Laser Operating Voltage Range | DC±4.5~±5.5V |
| Laser Operating Temperature Range | +5~+40℃ |
| Overall Storage Temperature Range | -25~55℃ |
| Overall Relative Humidity | 40~70% |
| Overall Power Supply Input (with Filter) | AC 220V (86~264V) |
| Communication Interface | RS232/485 |
| Power Dissipation | 50W |
| Dimensions | 480mmx350mmx44mm |

Note: All specifications are subject to change without notice.

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