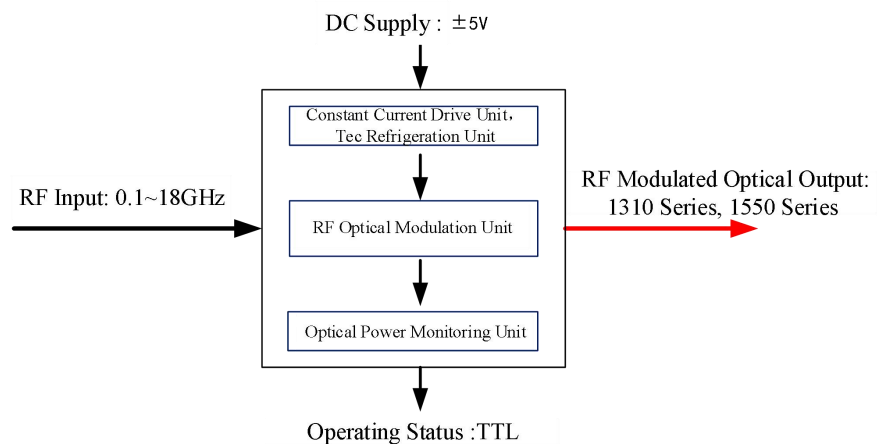




This product directly modulates the intensity of the laser in response to an input RF signal of 0.1-18 GHz, completing the electro-optic conversion. It outputs an RF-modulated optical signal at either the 1310 nm or 1550 nm Wavelength series. After transmission through an optical fiber, it provides a modulated optical signal to the optoelectronic conversion component (photodetector)

Product Schematic Diagram

This product uses an external +5V DC single-power supply and can be customized to include internal TEC cooling (powered by +5V DC). It features a metal package with an FC/APC pigtail output optical interface. The schematic diagram of the product is shown below:



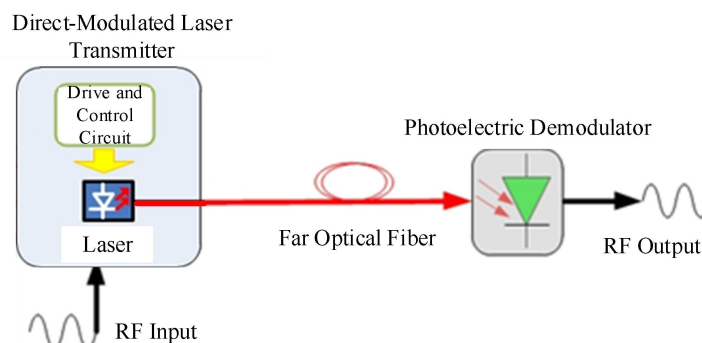
Applications

- Radar
- Electronic countermeasures
- Communications
- RF signal transmission
- Other platforms include ground, vehicle-mounted, airborne, and spaceborne systems

Features

- Compact
- Lightweight
- Low noise
- Stable wavelength across a full temperature range
- A capacity for mass production

Typical Application Example



Typical Indicator

Operating Conditions	
Operating Temperature (T _A)	-40°C ~ +70°C
Power Supply Voltage (V _{cc})	±5V±0.25V
Power Supply Current (I _{cc})	≤160mA
Performance Indicators	
Operating Wavelength	1310-Wavelength series, 1550-Wavelength series
RF Operating Frequency	0.1GHz~18GHz
Optical Output Power	≥3dBm
RF Insertion Loss	≤25dB
In-Band Flatness	≤±1dB
Input P-1	≥15dBm
Noise Coefficient	≤35dB
Quality Level	
This product meets GZ1-level military standards for application environment.	

Explanation

(1): No RF amplification is included for both optical transmission and reception in this instance. RF gain can be implemented if required.

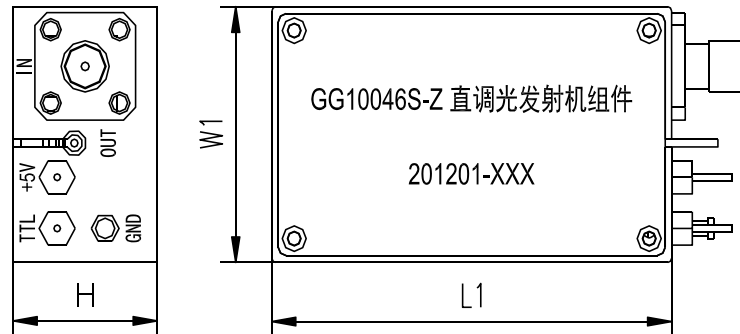
Interface Definition

Type	Connector
RF Input	SMA (Female Connector) (Other types of RF connectors can be customized)
Output Port	FC/APC(Other types of connectors and fiber types can be customized)
Fiber	SMF(Standard)
Power Supply	Through-hole capacitor Pin (Soldering temperature not exceed 300°C for more than 3 seconds)
Warning (TTL)	Through-hole capacitor Pin (Soldering temperature not exceed 300°C for more than 3 seconds)

Direct-Modulated Laser Transmitter Component

DATASHEET | OCTOBER 2024

Outline Drawing



Package Type: Metal cavity package.

Weight: 200g.

External Dimensions: Length×Width×Height(50.0mm×30.0mm×18.0mm)

Physical Photo

