

# Model-M107E

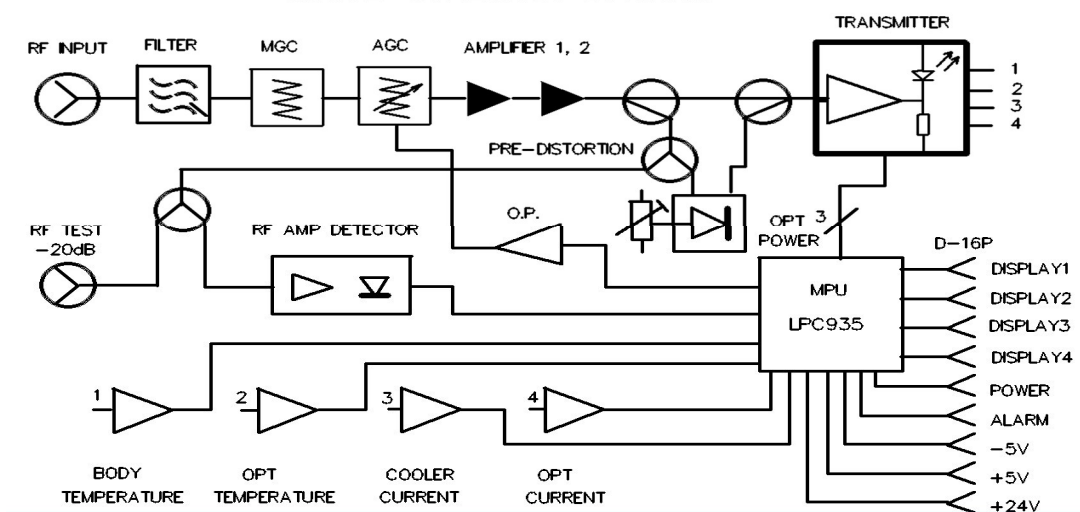
## 1310nm Optical Transmitter



## Features

- ▶ 45~860MHz bandwidth;
- ▶ High-performance DFB laser to increase the signal quality in HFC;
- ▶ Low noise, low distortion and pre-AMP to meet low RF input signal;
- ▶ AGC (Automatic Gain Control) and field MGC (Manual Gain Control)
- ▶ RF overdrive protection for LD alarm and automatic LD shutdown;
- ▶ ATC(Automatic Temperature Control) and APC(Automatic Power Control)
- ▶ Advanced high efficiency switching power supply (176V-264V);
- ▶ Alarm for over operation ,low optical power output and communication
- ▶ Reliable thermal structure design to ensure high stability and long operating life of the equipment.

M107E-SCHMATIC DIAGRAM



## Parameters

	Item	Unit	Specification
1	Type of laser		DFB
2	Wavelength	nm	1310±20
3	Modulation mode		Direct Light Intensity Modulation
4	Output Optical Power	mw	8 10 12 14 16 18 20 22 24 26
5	Fiber Connector		FC/APC SC/APC
6	Frequency Range	MHz	45~930
7	Input RF Signal Level	dBmv	15~35
8	AGC range	dB	0~10 (MGC: 0~20dB)
9	CNR	dB	≥51 note
10	CTB	dB	≤-68 note
11	CSO	dB	≤-62 note
12	Flatness	dB	±0.75
13	RF Input Impedance	Ω	75
14	RF Input Return Loss	dB	≤-15
15	APC Control Precision	dB	≤±0.2
16	ATC Control Precision	°C	25±2
17	Max TEC Operating current	mA	DC+5V@850
18	MTBF	h	≥40000
19	Laser Operating Voltage Range	V	DC±4.5--±5.5
20	Laser Operating Temperature Range	°C	+5~+40
21	Overall Storage Temperature Range	°C	-25~55
22	Overall Relative Humidity	%	40~70
23	Overall Power Supply Input (with Filter)	V	AC220(176~264V)
24	Power Dissipation	W	15
25	Dimensions(WxDxH)	mm	210x160x40
26	Weight	Kg	1.75

## Model

M107E-8D	8mW(9dBm)
M107E-10D	10mW(10dBm)
M107E-12D	12mW(10.8dBm)
M107E-14D	14mW(11.5dBm)
M107E-16D	16mW(12dBm)
M107E-18D	18mW(12.5dBm)
M107E-20D	20mW(13dBm)