

# ON-8604DM Four way AGC Field Optical Node

## MODEL: ON-8604DM



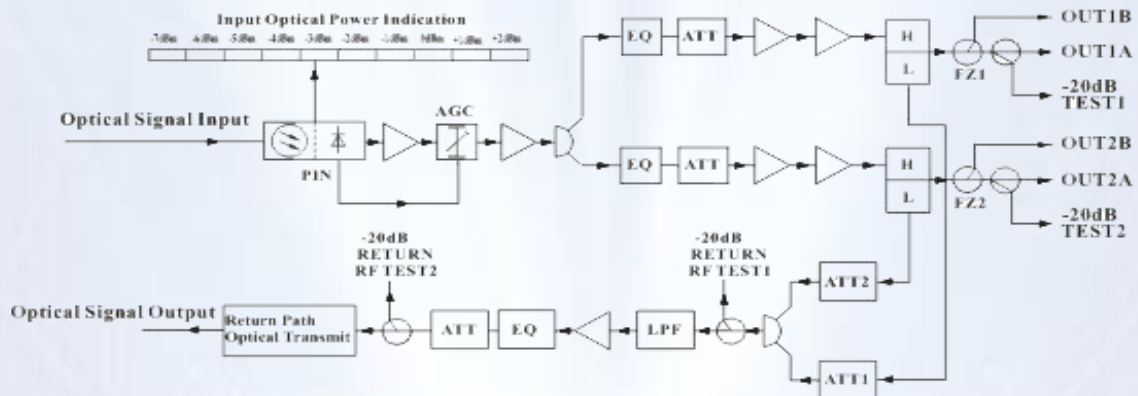
### Summary

ON-8604DM is two way model. Full GaAs MMIC amplification is used as forestage, and GaAs module amplifier is used as backward stage. It meets extremely high performance index, because of optimized circuit design and design experience got by ourselves for over ten years. The fixed film threading is used for RF amplification and equilibrium to make engineering debug de more convenient. It is the best choice for CATV network.

### Performance Characteristic

- There is 3rd level luminescent tube optical power indication in the PIN photoelectric translating tube with high responsivity. So that the optical power indication is clear.
- Line optimal design, forestage SMT production process and backward stage module amplification is used. GaAs power-double output has high gain, low distortion and small heat dissipating capacity. RF linear is better.
- The fixed film threading is used for RF attenuation and equilibrium of MF and DM. Equilibrium quantity will be changed if attenuation insert is plugged in the place of EQ. So it is easy to debug.
- Output level is unchanged and CTB, CSO, is essentially the same when optical power input is changed ( $-7 \sim +3\text{dBm}$ ).

### Block Diagram



**Technical parameter:**

Items	Unit	ON-8604DM
Forward Path		
Optical Input Range	dBm	-7 ~ +3
Recommended Range	dBm	-5 ~ +1
Optical Return Loss	dB	>45
Optical Receiving Wavelength	nm	1100 ~ 1600
Optical Fiber Connector Type		FC/APC, SC/APC (Or specified by the user)
Optical Fiber Type		Single-mode
C/N	dB	≥ 51
C/CTB	dB	≥ 65
C/CSO	dB	≥ 60
Frequency Range	MHz	45 ~862
Flatness in Band	dB	±0.75
Nominal Output Level	dBμV	≥110
Max Output Level	dBμV	≥ 114
Output Return Loss	dB	≥14
Output Impedance	Ω	75
Electrical Control Equilibrium Range	dB	0~10
Electrical Control Attenuation Range	dB	0~20
Return Path		
Optical Launch Wavelength	nm	1310±10
Laser Type		FP or DFB
Output Optical Power	dBm	1 ~ 5
Optical Connector Type		FC/APC, SC/APC (Or specified by the user)
Frequency Range	MHz	5 ~ 65 (Or specified by the user)
Flatness in Band	dB	±1
Input level	dBμV	85 ~ 90
Output Impedance	Ω	75
Input Return Loss	dB	≥16
NPR	dB	≥10(NPR≥30 dB)
Supply Voltage	V	A: AC 150~265; B: AC 24~90 (50HZ)
Operating Temperature	°C	-40~60
Storage Temperature	°C	-40~65
Relative Humidity	%	Max 95%No Condensation
Power Consumption	VA	≤ 30
Dimension	mm	240(L) X 240(W) X 150(H)

**Special Notice:**

The performance parameters of this manual according to GY/T 143-2000 <Specifications and methods of measurement on AM optical transmitter and receiver used in CATV system> .We get it under the following testing environment.

**Tips:**

Standard output level: We get the output level when the receiving optical power is -2dBm, and 4 output ports are both allocation output. Helpful hints: The RF signal should be set to be 6~9dB incline output in practical engineering applications for suggestion in order to improve nonlinear index of cable transmission system under optical contactor.

**Due to continuous improvement, all products specifications are subject to change without further notice. Contact us for custom requirements. E-mail: [Sales@zhtelecomm.com](mailto:Sales@zhtelecomm.com) Website: [www.zhtelecomm.com](http://www.zhtelecomm.com) Tel: +86-01081593787 Fax: +86-01081593789**