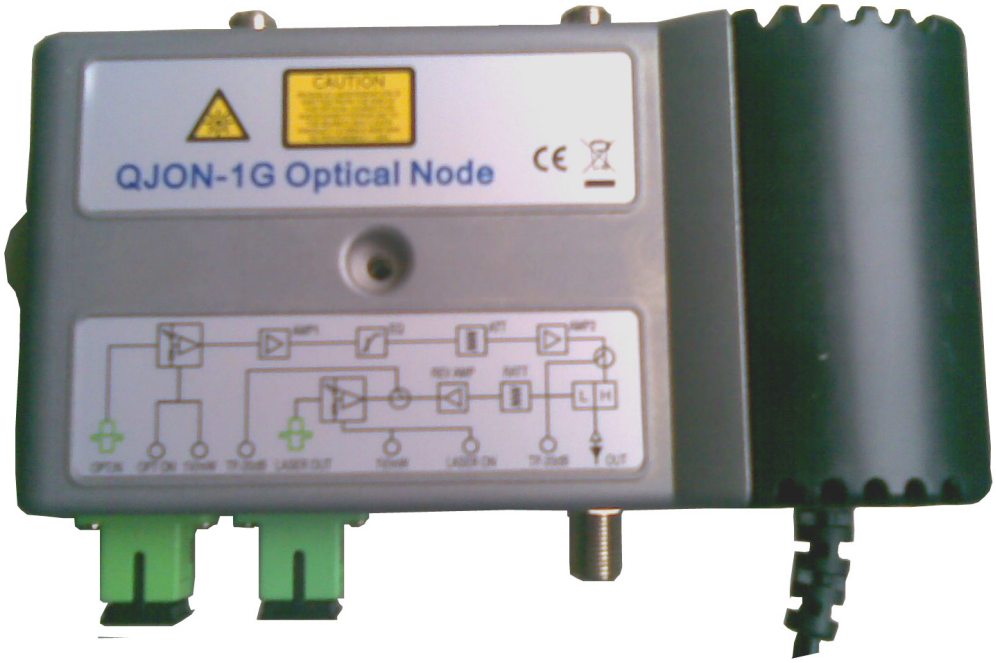
QJON-1G
Optical Mininode FTTH

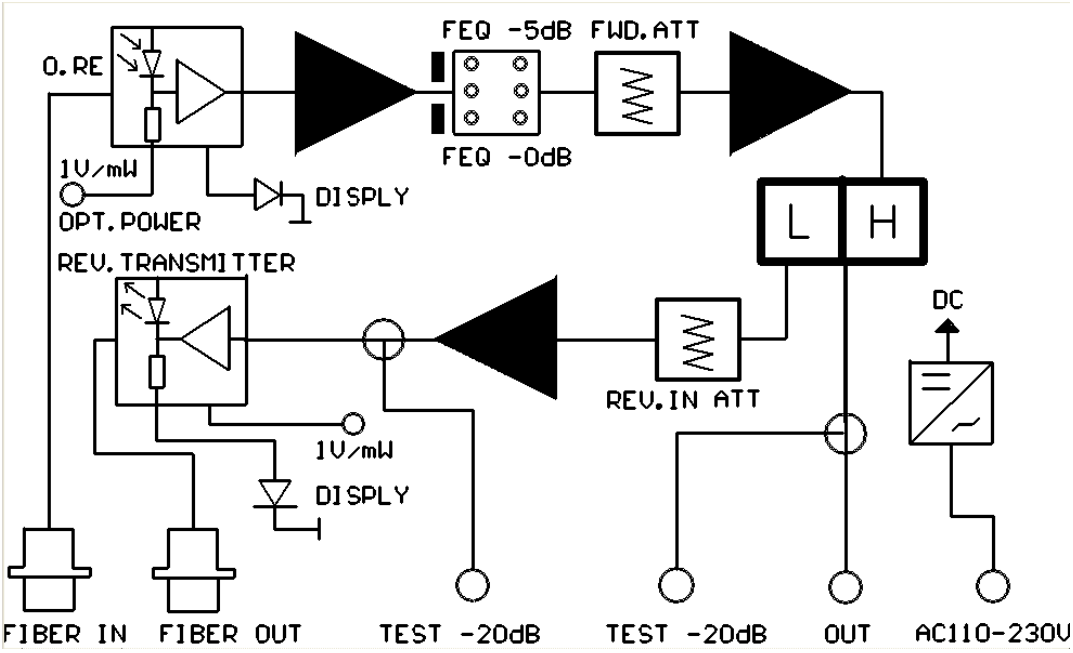


The QJON-1G optical mini node is a new development of a new generation. This high-performance, reliable and compact size two-way receiver has a high quality GaAs hybrid module. This unit is suitable for HFC-networks to Fiber-to-the-Home (FTTH) and triple-play applications as high-speed data transmission services, TV and telephony.

FEATURES:

- Small housing of the unit, low energy consumption
- 1 GHz RF working platform with advanced GaAs technology
- Integrated 0dB or 5dB forward equalizer, to be changed with jumper
- Optical input level range from –9dBm to 0dBm
- The unit is configured as two-way even RF level output
- Motherboard mounted in SMD technology
- Adapted two-way plug-in diplexfilter, so the output channel range can easily be changed
- Reverse channel FP-transmitter
- Highly efficient switched power supply.

Block Diagram



SPECIFICATION

SYMBOL	PARAMETER	CONDITIONS		TYP.	MAX.	UNIT
Down-stream Receiver						
λ	Optical Wavelength		1290		1600	nm
Pin	Optical Input Power	continuous	0.126 -9		1 0	mW dBm
F	Frequency Range (optional)		85		1000	MHz
FL	Flatness of Frequency Response	f=85 to 1000MHz	-	±0.75		dB
S_{22}	Optical Output Return Loss	f=85 to 1000MHz	15		-	dB
Vo	Output Level			90		dBμV
	Optical Output Return Loss		45	-	-	dB
CTB		59chs flat, Vo=32dBmV f_m=859.25MHz			-68	dB
X_{MOD}					-	dB
CSO					-63	dB
CNR	20km fiber, 0dBm input		-	-	>51	dB
F	Equivalent Noise Input	f=55MHz	-	-	7	pa/Hz
Up-stream Transmitter						
λ	Optical Wavelength		1290	1310	1330	nm
W_{out}	Optical Output Power		-5	1	2	mW
$V_{opt.in}$	Monitor Voltage	λ=1310		1		V/mW
V_R in	Input Level			75		dBμV
F	Frequency Range (optional)		5		65	MHz
FL	Flatness of Frequency Response	f=5 to 65MHz	-	±0.75		dB
S_{11}	Input Return Loss	f=5 to 65MHz	16	18	-	dB
	Optical Input Return Loss		45	-	-	dB
I_{tot}	Total Current Consumption (DC)	AC220V	-	35	-	W
Tmp	Operating Mounting Base Temperature		-20	-	70	℃

Packing list：

QJON-1G Optical Node ×1
Fixed attenuator（0dB） ×1
Fixed attenuator（3dB） ×1
Manual ×1