



### Description:

Designed to satisfy requirements for building large CATV network trunk lines and line extensions.

Hermetic casing protects the amplifier from environmental impact- dust and humidity.

### Features:

- Wide range of input optical power: from -9 to +2dBm
- Interstage equalizer, attenuator and ICS
- Automatic Level Control (ALC)
- Burst Mode (Optional)
- Built-in power inserter
- Weatherproof case (IP65)
- Low voltage protection
- Two current outputs



OCN-54100 Technical

DTK

OCN-54100 Block Scheme

Optical Section			
DOWN Stream		UP Stream	
Wavelength	1290 ÷ 1610nm	Wavelength	CWDM @ ITU-T/6.694.2
Fiber	SM 9/125µm	Laser Type	FP or DFB
Optical Return Loss	> 40dB	Frequency Range	5 ÷ 204MHz
Equivalent input noise	≤ 6pA / VHz	Optical Output Power	0 ÷ 6 ±0.5dBm
OP range with ALC Locked	-9 ÷ +2 dBm		

General Specifications	
Power Supply Coaxial	100 ÷ 265VAC
Power Supply Mains	24 ÷ 75VAC
Max AC current per point	< 7A AC
Power Consumption	21.5W
Temperature Range	-40 ÷ +55°C
Protection Level	IP65
Dimensions	215x200x90mm
Weight	1.85kg
Output Connectors	PG11 on 5/8"
Test Point Connector	F-Type, Female
Number of Output ports	2
Group Delay (f > 15MHz)	≤2 nsec @ 1MHz BW
Hum Modulation	70dB
Optical Connectors	SC/APC
Surge Protection	6 (EN 60728-3)
EMC	EN50083-2

RF Section			
DOWN Stream		UP Stream	
Frequency Range	47 ÷ 1006MHz	Frequency Range	5 ÷ 204 MHz
Input Gain Control	0 ÷ -20dB	Flatness	≤ ± 0.5dB
Flatness	± 0.5dB	Input RF level	57 ÷ 80dBµV
Output Return Loss	> -18dB @ Z=75Ω	Input Ret. Loss	> -18dB @ Z=75Ω
Interstage Gain Control	0 ÷ 20dB, 1dB step	Reverse Input Attenuator	0 ÷ 20dB, 1dB step
Interstage Slope Control	0 ÷ 18dB	Ingress Control Switch	0dB, 6dB or OFF (manual)
Noise Current Density	6pA/√Hz	Noise Figure	6.5dB @ 5 ÷ 200 MHz
RF ALC Accuracy (Locked)	± 0.5dBµV	OMI Adjustment	0 ÷ -20dB
Hum Modulation	≤ -70dB @ 7A/AC	OMI Setting	15%@min. 76dBµV
Test Port	-20 ± 0.5dB	Laser rise/fall time	< 1 / <1 µs
Return Loss	≥ 18dB / 75Ω		
Output level @ CTB ≥ 60dB	116dBµV		
Output level @ CSO ≥ 60dB	117dBµV		
Umax (112QAM Channels @ 1.0GHz)	111.5dBµV		

