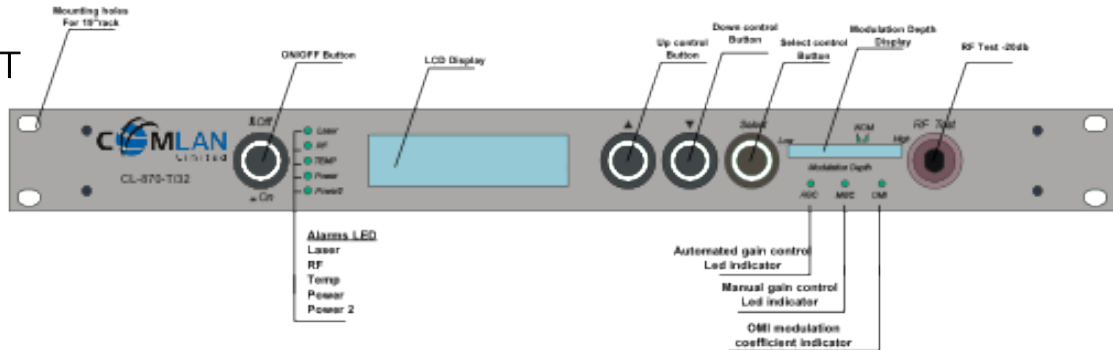
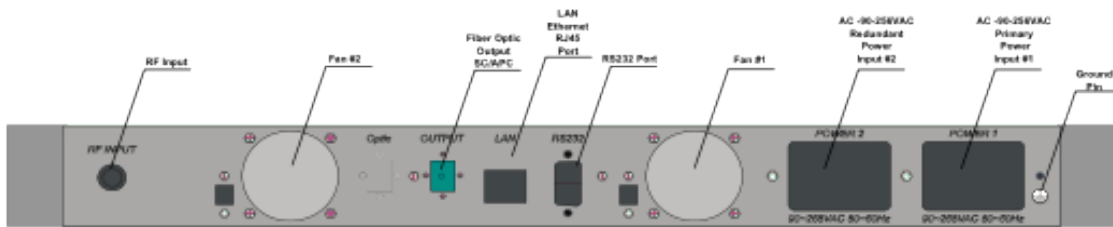


### CL-870-T

#### FRONT



#### BACK



### PRODUCT DESCRIPTION

The Comlan CL-870-T is a 1310nm directly modulation optical transmitter that employs a high linearity DFB laser from a world renowned manufacturer. The features of our unit include perfect pre-distortion adjustment circuitry, a high quality APC laser, and an ATC closed loop control circuit. All the operating parameters are controlled by a microprocessor. The unit features a front panel LCD that displays relative operating data and signal fault information.

The CL-870-T series is designed and manufactured with reliability in mind. By integrating the advantages of high end 1310nm lasers with well tested and proven circuitry a highly reliable and stable transmitter is achieved. Our CL-870-T Transmitters are suitable for even the most demanding of applications.

Our unit features powerful remote management features via SNMP. Our remote management software is able monitor and report on parameters such as RF level, output power; operating current, laser temp, laser cooling current, power voltage, SBS, OMI, and RF operational mode.

### PRODUCT FEATURES

- Dual Modulated RF driver with high efficiency laser pre-distortion adjustment circuitry.
- Fully automatic self adjusting Optical Modulation Index (OMI) control with 20 manual preset options. OMI control is achieved via Automatic Gain control (AGC) or Manual Gain Control (MGC) with adjustable presets. Under AGC selection the input range is 78dBuV-88dBuV and the system index automatically remains optimum. Under the MGC setting the input range can be adjusted from 75dBuV-90dBuV via the ATT control on the front panel.
- Front panel has 20 preset OMI adjustment levels to ensure optimum modulation of optical signal. Under AGC setting the OMI index is automatically set at the ideal level. A Manual Gain Control option is available manually change the OMI index if desired.
- Automatically switching dual power supplies with two operating settings. The default setting is to have one power supply running with the second as a cold backup. A second setting is to have both power supplies working at the same time with one as hot backup. If primary power fails the unit automatically switches to the backup. Switch time is less than  $\leq 10\mu s$ .

## CL-870-T

- Fully automatic control of casing temperature ensures a long operating life of the laser. Casing temperature is monitored and controlled by a microprocessor. Display screen shows the actual operating temperature in real time. When casing temperature reaches  $\geq 45^{\circ}\text{C}$  a backup fan system automatically engages to cool the unit. When casing temperature drops to  $\leq 35^{\circ}\text{C}$  the fans automatically turn off to extend the operating life of the cooling system.

## TECHNICAL SPECIFICATIONS

Performance		Index	Supplement	
Optic feature	Wavelength	(nm)	1310 $\pm$ 10	
	Output power	(mW) (dBm)	4~32 (+6) - (+15)	
	Return loss	(dB)	$\geq 55$	
	Optical fiber connector		SC/APC	Optional FC/APC
RF feature	Work bandwidth	(MHz)	45-862	
	Input level	(dBmV)	15~25	AGC
	Flatness	(dB)	$\leq \pm 0.75$	45~862MHz
	Return loss	(dB)	$> 16$	45~750MHz
	Input impedance	( $\Omega$ )	75	RF/INPUT
	RF interface		F type	Optional imperial
Link feature	Transmit channel		PAL-D/60CH	NTSC/80CH
	CNR	(dB)	$\geq 52$	10Km optical fiber, 0dBm receive
	CTB	(dB)	$\leq -70$	
	CSO	(dB)	$\leq -63$	
General feature	Network interface port		RJ45, RS232	Support I.E. & SNMP
	Power supply	(V)	90~265VAC	-48VDC optional (30~60VDC)
	Power Consume	(W)	$\leq 50$	Single power works
	Work temp.	( $^{\circ}\text{C}$ )	-5~65	Machine temp. control automatically
	Storage temp.	( $^{\circ}\text{C}$ )	-40~85	
	Operating relative humidity	(%)	5~95	
	Size	(") (mm)	19 $\times$ 14 $\times$ 1.75= 482 $\times$ 355 $\times$ 44	(W) $\times$ (D) $\times$ (H)
	Weight	KG LB	6 12	

CL-870-T

PRODUCT SERIES

Model	Power (mW)	Bandwidth (MHz)	59 route PAL-D system index (dB)			
			Output Power	CNR2	CTB	CSO
CL-870-T/4	≥4	47~860	+6dBm	≥52	≤-70	≤-63
CL-870-T/6	≥6	47~860	+7.7dBm	≥52	≤-70	≤-63
CL-870-T/8	≥8	47~860	+9dBm	≥52	≤-70	≤-63
CL-870-T/10	≥10	47~862	+10dBm	≥52	≤-70	≤-63
CL-870-T/12	≥12	47~862	+10.7dBm	≥52	≤-70	≤-63
CL-870-T/14	≥14	47~862	+11.4dBm	≥52	≤-70	≤-63
CL-870-T/16	≥16	47~862	+12dBm	≥52	≤-70	≤-63
CL-870-T/18	≥18	47~862	+12.5dBm	≥52	≤-70	≤-63
CL-870-T/20	≥20	47~862	+13dBm	≥52	≤-70	≤-63
CL-870-T/24	≥24	47~862	+13.8dBm	≥52	≤-70	≤-63
CL-870-T/32	≥32	47~862	+15dBm	≥52	≤-70	≤-63