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HT8300 (With AGC)

Direct Modulated 1310nm Transmitter

PRODUCT DESCRIPTION

1310nm direct modulated 1310nm transmitter, adopts high linearity DFB laser of famous brand in the world, and builds-in perfect pre-distortion adjustment circuit and laser APC, ATC closed loop control circuit. All the operating parameters of HT8300 direct modulated 1310nm transmitter are controlled by microprocessor, and the LCD screen on the front panel can display relative operating status and the fault information.

HT8300 series is designed and produced by absorbing the advantages of all kinds of 1310nm transmitters from both home and abroad. Featured of 1310nm transmitter with high index, multi-function and high reliability, it is suitable for high-end subscribers application.



- Dual Module RF driver, high efficiency laser pre-distortion adjustment
- Full-automatic OMI control, AGC & MGC Under AGC status, input level is between 78~88dBuV, and system index is optimum Under MGC status, input range can be adjusted between 75~90dBuV by the ATT on front panel
- Front panel has 20 grades OMI status display (Modulation Depth)
 - Under AGC status, within RF range, OMI is always at NOM status
 - Under MGC status, OMI can be at NOM status by adjusting ATT
- Built-in dual backup power supplies; Switch full-automatically.
 - One is working, with the other as cool backup (suggested).
 - Both are working at the same time, with one as hot backup. If one is damaged, it will switch to the



other full-automatically. Switch time \leq 10us.

 Case temperature auto-control, ensure the long life of the laser.

Case temperature is monitored and controlled by microprocessor. The display screen shows the actual operation temperature in time.

When casing temperature \ge 45 $^{\circ}$ C, two fans at the back panel will open automatically to make compulsive cooling.

When casing temperature $\leq 35 \,^{\circ}$ C, the fans will stop automatically to ensure its life-span.

| Dual RF input port. | |
|---------------------------|-----------------------|
| AM interface | Input 59 routes PAL-D |
| (47-550MHz) | |
| Digital interface (-10dB) | Input digital video |
| (550-750MHz). | |



TECHNIQUE INDEX

| Performance | | | Index | Supplement | |
|-----------------|-------------------------|--------|---------------|-------------------------------------|--|
| Optic feature | Wavelength | (nm) | 1310±10 | | |
| | Output power | (mW) | 4~24 | | |
| | Return loss | (dB) | ≥55 | | |
| | Optical fiber connector | | SC/APC | Optional FC/APC | |
| RF feature | Work bandwidth | (MHz) | 45-862 | | |
| | Input level | (dBmV) | 15~25 | AGC | |
| | Flatness | (dB) | ≤±0.75 | 45~862MHz | |
| | Return loss | (dB) | >16 | 45~750MHz | |
| | Input impedance | (Ω) | 75 | RF/INPUT | |
| | RF interface | | F type | Optional imperial | |
| Link feature | Transmit channel | | PAL-D/60CH | NTSC/80CH | |
| | CNR | (dB) | ≥52 | 10Km optical fiber, 0dBm receive | |
| | СТВ | (dB) | ≤-70 | | |
| | CSO | (dB) | ≤-63 | | |
| | Network interface port | | RJ45, RS232 | Support I.E. & SNMP | |
| | Power supply | (V) | 90~265VAC | -48VDC optional (30~60VDC) | |
| General feature | Power Consume | (W) | ≤50 | Single power works | |
| | Work temp. | (°C) | -5~65 | Machine temp. control automatically | |
| | Storage temp. | (°C) | -40~85 | | |
| | Relative humidity | (%) | 5~95 | | |
| | Size | (") | 19×14.25×1.75 | (W)x(D)x(H) | |



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PRODUCT SERIES

| Model | Power (mW) | Bandwidth (MHz) | 59 route PAL-D system index (dB) | | | |
|--------|------------|--------------------|----------------------------------|------|------|------|
| | | | Link Loss | CNR2 | СТВ | CSO |
| HT8304 | ≥4 | 47~860 | 7 | ≥52 | ≤-70 | ≤-63 |
| HT8306 | ≥6 | 47~860 | 9 | ≥52 | ≤-70 | ≤-63 |
| HT8308 | ≥8 | 47~860 | 10 | ≥52 | ≤-70 | ≤-63 |
| HT8310 | ≥10 | 47~862 | 11 | ≥52 | ≤-70 | ≤-63 |
| HT8312 | ≥12 | 47~862 | 12 | ≥52 | ≤-70 | ≤-63 |
| HT8314 | ≥14 | 47~862 | 12.5 | ≥52 | ≤-70 | ≤-63 |
| HT8316 | ≥16 | 47~862 | 13 | ≥52 | ≤-70 | ≤-63 |
| HT8318 | ≥18 | 47~862 | 13.5 | ≥52 | ≤-70 | ≤-63 |
| HT8320 | ≥20 | 47~862 | 14 | ≥52 | ≤-70 | ≤-63 |
| HT8322 | ≥22 | 47~862 | 14.5 | ≥52 | ≤-70 | ≤-63 |
| HT8324 | ≥24 | 47~862 | 15 | ≥52 | ≤-70 | ≤-63 |