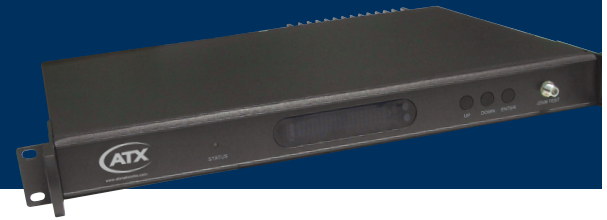


Q-SERIES® Optical

Fiber Optic Products



QFOT 1310nm 870/1000 MHz Fiber Optic Transmitter:

Features:

- ▶ Up to 22mW output power in 1RU
- ▶ Primarily used for TV video signals, digital TV signals & data signals transported over fiber
- ▶ Powering by 90-250 VAC (50/60 Hz) or -48 VDC
- ▶ 1310 ± 20nm wavelength
- ▶ Can accommodate up to 14 dB path loss
- ▶ High performance DFB direct modulated laser, advanced pre-distortion circuit & digital automatic processing techniques
- ▶ Microprocessor monitoring system automatically ensures excellent performance
- ▶ 45-870 & 45-1000 MHz at levels from 15-25 dBmV (AGC/MGC)
- ▶ Electronic level setting & adjustments



QFOT 1310nm Specifications

| SPECIFICATIONS | VALUE | | | | | | | | | | |
|-------------------------|---|------|-------|-------|---------|---------|-------|---------|-------|---------|--|
| | 4mW | 6mW | 8mW | 10mW | 12mW | 14mW | 16mW | 18mW | 20mW | 22mW | |
| OPTICAL POWER | 4mW | 6mW | 8mW | 10mW | 12mW | 14mW | 16mW | 18mW | 20mW | 22mW | |
| OPTICAL LINK PATH LOSS | 7 dB | 9 dB | 10 dB | 11 dB | 11.8 dB | 12.5 dB | 13 dB | 13.6 dB | 14 dB | 14.4 dB | |
| OPTICAL WAVELENGTH | 1310nm +/- 20 | | | | | | | | | | |
| TYPE OF LASER | Cooled DFB in 14-pin Butterfly Package with Isolator | | | | | | | | | | |
| OPTICAL MODULATION MODE | Direct Modulation | | | | | | | | | | |
| OPTICAL CONNECTOR TYPE | SC/APC, Single Mode | | | | | | | | | | |
| FREQUENCY RANGE | 45-870/1000 MHz | | | | | | | | | | |
| RF INPUT LEVEL | 15-25 dBmV | | | | | | | | | | |
| FLATNESS IN BAND | +/- 0.75 dB | | | | | | | | | | |
| RF INPUT IMPEDANCE | 75 Ω | | | | | | | | | | |
| INPUT RETURN LOSS | ≥ 16 dB from 45-870/1000 MHz | | | | | | | | | | |
| C/COMP. TR. BT. | ≥ 67 dB | | | | | | | | | | |
| C/COMP. 2nd ORD. | ≥ 62 dB | | | | | | | | | | |
| CARRIER-TO-NOISE RATIO | ≥ 51 dB | | | | | | | | | | |
| AGC CONTROL RANGE | +/- 15 dB | | | | | | | | | | |
| MGC CONTROL RANGE | +/- 15 dB | | | | | | | | | | |
| POWER VOLTAGE | 100-240 VAC (50/60 Hz) | | | | | | | | | | |
| POWER CONSUMPTION | 20W | | | | | | | | | | |
| OPERATION TEMPERATURE | 0°C to +45°C (+32°F to +113°F) | | | | | | | | | | |
| STORE TEMPERATURE | -20°C to +65°C (-4°F to +149°F) | | | | | | | | | | |
| RELATIVE HUMIDITY | Max 95% Non-condensing | | | | | | | | | | |
| DIMENSIONS | 1.75"H x 19.0"W x 12.8"D (4.45H x 48.26W x 32.51D cm) | | | | | | | | | | |
| WEIGHT | 11.0 lbs (5.0 kg) | | | | | | | | | | |

QFOT 1310nm 870/1000 MHz Fiber Optic Transmitter:

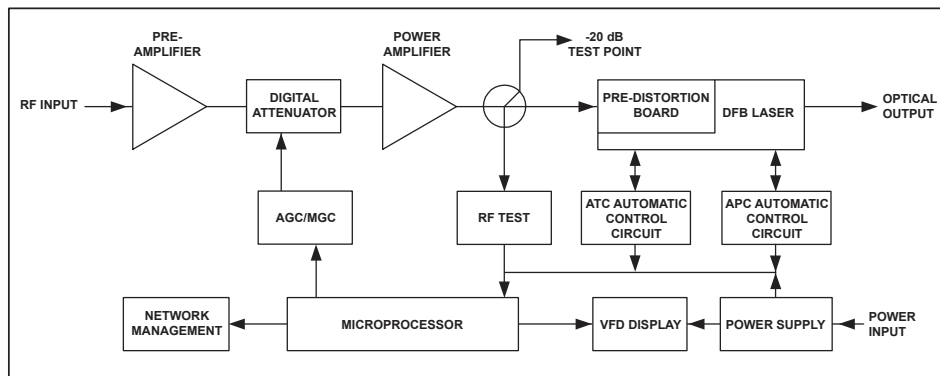
Optical Link Path C/N Specifications

| OPTICAL LINK PATH C/N SPECIFICATIONS | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 870/1000 MHz | | | | | | | | | | | | | | | | | |
| OPTICAL LOSS (dB) | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | |
| QFOT1310-04 | 53.8 | 52.8 | 51.8 | 51.0 | 50.1 | 49.2 | 48.2 | | | | | | | | | | |
| QFOT1310-06 | | | | 53.0 | 52.0 | 51.0 | 50.1 | 49.1 | 48.1 | | | | | | | | |
| QFOT1310-08 | | | | | 52.8 | 51.9 | 51.0 | 50.1 | 49.1 | 48.2 | | | | | | | |
| QFOT1310-10 | | | | | | 52.9 | 51.9 | 51.0 | 50.1 | 49.1 | 48.2 | | | | | | |
| QFOT1310-12 | | | | | | | 52.7 | 51.8 | 50.8 | 49.9 | 49.0 | 48.0 | | | | | |
| QFOT1310-14 | | | | | | | | 52.4 | 51.5 | 50.5 | 49.5 | 48.6 | 47.8 | | | | |
| QFOT1310-16 | | | | | | | | | 52.0 | 51.0 | 50.1 | 49.1 | 48.1 | | | | |
| QFOT1310-18 | | | | | | | | | | 52.5 | 51.6 | 50.6 | 49.7 | 48.7 | 47.9 | | |
| QFOT1310-20 | | | | | | | | | | | 51.9 | 51.0 | 50.0 | 49.0 | 48.0 | | |
| QFOT1310-22 | | | | | | | | | | | | 52.2 | 51.4 | 50.4 | 49.4 | 48.6 | 47.8 |

Ordering Information

| Part Number | Description |
|---------------|--|
| QFOT1310-04 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 4mW |
| QFOT1310-06 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 6mW |
| QFOT1310-08 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 8mW |
| QFOT1310-10 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 10mW |
| QFOT1310-12 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 12mW |
| QFOT1310-14 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 14mW |
| QFOT1310-16 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 16mW |
| QFOT1310-18 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 18mW |
| QFOT1310-20 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 20mW |
| QFOT1310-22 | Optic Transmitter, 870 MHz, 1310nm, DFB, SC/APC, 22mW |
| QFOT1G1310-04 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 4mW |
| QFOT1G1310-06 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 6mW |
| QFOT1G1310-08 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 8mW |
| QFOT1G1310-10 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 10mW |
| QFOT1G1310-12 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 12mW |
| QFOT1G1310-14 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 14mW |
| QFOT1G1310-16 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 16mW |
| QFOT1G1310-18 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 18mW |
| QFOT1G1310-20 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 20mW |
| QFOT1G1310-22 | Optic Transmitter, 1000 MHz, 1310nm, DFB, SC/APC, 22mW |

Functional Schematic



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Specifications subject to change without notice.

