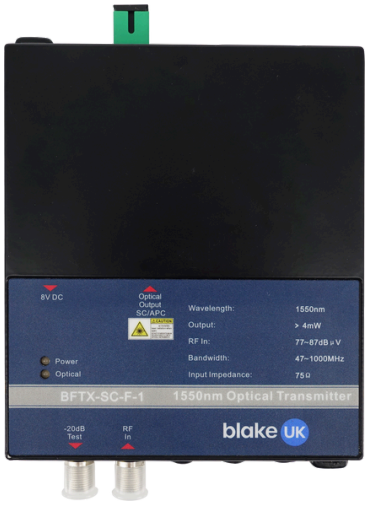
Blake Fibre
BFTX-SC-F-1

RF to Fibre Optical Transmitter



The 1550nm RF to Fibre transmitter sends high-quality RF signals over a fibre optic cable. It's ideal for use in fibre-to-the-home (FTTH) networks and helps deliver strong, reliable connections over short to medium distances, up to 10km.

It works by converting electrical signals into light signals using a special laser. This light is then sent through a fibre optic cable to transmit TV signals over long distances. The transmitter uses advanced technology to reduce distortion and keep the signal clear, even when traveling through the fibre. It also has built-in systems that automatically adjust the signal strength to keep everything running smoothly.

- **Low Chirp, High-Quality Laser:** Reduces signal distortion, keeping the transmission clear.
- **Automatic and Manual Signal Control:** Maintains consistent signal strength automatically or allows manual adjustments.
- **Built-in Signal Adjustment:** Prepares signals for better performance over different distances and speeds.
- **Efficient RF Driver:** Improves the laser's performance for clearer signals.
- **Temperature Control:** Keeps the laser at the right temperature to help it last longer.
- **Easy Signal Monitoring:** Displays the signal status in a simple way for easy tracking.
- **Backup Power Supply:** Automatically switches to a backup power source if needed, ensuring continuous operation.

Applications:

- **IPTV and VOD Services:** Delivers TV and video-on-demand services in local areas, sending both analog and digital signals up to 15Km (typically around 10Km) and pure digital signals up to 40Km.
- **WDM Multiplexing:** Works for combining different signals over long distances, more than 70Km.

Fibre Specification:

Wavelength	1550nm
Side Mode Suppression	≥40dB (SMSR)
Noise Intensity	≤-150dB/Hz (RIN 20-1000MHz)
Output Power	≥6dBm
Return Loss	≥45dB
Connector	SC/APC

RF Specification:

Bandwidth	47-1000MHz
Input Level	22±5dBmV (AGC)
Flatness	≤±0.75 dB (45-1000MHz)
Output Power	≥6dBm
Return Loss	>16dB
Input Impedance	75Ω (RF INPUT)
RF Test	-20dB