

LFOT AT1550 is a high performance externally modulated analog transmitter utilizing 1550nm wavelength for forward path transmission of broadcast analog services. It is available in several optional configurations (including DWDM wavelength) and is characterized by 9,5dBm optical output power and SBS threshold of 16dBm.

AT1550 transmitters incorporate state of the art source laser allowing for high CNR carrier to noise ratio while advanced proprietary predistortion circuitry that drives optical modulator provides excellent PAL60 CSO and CTB performance, with 300MHz of digital channel loading 6dB below the analog channels.

The AT1550 transmitter is equipped with RS-232 port, which can be used to remote monitoring and control of the device utilizing CX3001 communication module installed in CH3000 mounting chassis. Together with other LightFlash II modular products, AT1550 optical transmitter creates full complement of products to support and enhance the deployment of traditional HFC, passive HFC and FTTH networks.

LFOT AT1550 1550nm externally modulated transmitter is available in a few versions varying in operating wavelength and provided in 2 performance variants: Standard or Premium.

## 1550NM ANALOG TRANSMITTER LIGHTFLASH II

### LFOT AT1550



- ▶ 9,5dBm optical output power
- ▶ 45 ÷ 870MHz RF bandwidth
- ▶ OMI adjustment and AGC circuitry
- ▶ Low RF input level 77dBµV/channel
- ▶ Front panel laser on/off
- ▶ 19" rack mountable

## PRODUCT SPECIFICATIONS

### ELECTRICAL AND OPTICAL PARAMETERS

RF passband	45 ÷ 870 MHz
Frequency response	±0,75 dB
Nominal RF input level:	
Manual mode	77 dB $\mu$ V/channel
AGC mode	82 dB $\mu$ V/channel
Input impedance	75 $\Omega$
RF return loss:	
46 ÷ 550MHz	16 dB
550 ÷ 870MHz	14 dB
Level stability	±0,6 dB
Test point insertion loss	-20 dB
Wavelength (BC broadcast type)	1545,3 ± 0,9 nm

### PHYSICAL PARAMETERS

Dimensions (WxDxH)	485 x 385 x 45 mm
Weight	5,7 kg
Operating temperature range	0 ÷ +50 °C
Storage temperature range	-25 ÷ +70 °C
Humidity	20 ÷ 85 %
Input voltage	90 ÷ 260 V AC
Power consumption	60 W

### CONFIGURATION

The AT1550 transmitter is mountable directly into 19" rack.

### RF AND OPTICAL INTERFACES

RF input – F -type (female at rear panel).

RF test point – F-type (female at front panel).

Optical output – SC/APC optical connector (at rear panel).

### AVAILABLE VERSIONS

#### Standard version transmitters:

AT1502-BC - broadcast type

AT1502-xx - DWDM type, where xx is the ITU channel number

#### Premium version transmitters:

AT1503-BC - broadcast type

AT1503-xx - DWDM type, where xx is the ITU channel number

### OPTICAL BUDGET AND PERFORMANCE

PARAMETER	Standard version	Premium version
CNR [dB]		
45 ÷ 550MHz	53	53
550 ÷ 870MHz	50	53
CSO [dB]		
45 ÷ 550MHz	67	67
550 ÷ 870MHz	64	64
CTB [dB]		
45 ÷ 550MHz	66	66
550 ÷ 870MHz	63	63
XMOD [dB]	65	65

*Parameters measured for PAL60 channel plan with 300MHz of digital channel loading 6dB below the analog channels.*