

ARRIS AT3553/3554

ANALOG 1550 NM EXTERNALLY MODULATED TRANSMITTER

The ARRIS AT3553 and AT3554 series high performance 1550 nm externally modulated analog transmitters are available in several optional configurations to meet various network requirements. They feature a minimum output power of 9.5 dBm with configurable dBm SBS suppression. The compact design minimizes rack space requirements and permits plugging the three-slot-wide, full-depth transmitter module in either the front or rear of the CH3000 3RU chassis to optimize equipment installation and operating conditions.



- 9.5 dBm minimum output power
- 1 GHz RF bandwidth
- Analog 64-channel PAL B/G plus QAM loading
- 65 km and 100 km path length options
- Multiple broadcast wavelength options (1545nm or 1563 nm), or optional selection of DWDM ITU-grid channel
- Adjustable SBS suppression
- User-settable RF input level
- AGC Select: CW, Video, Manual (no AGC)
- Front access –20 dB input test point
- LED status indicators
- Front panel Laser On/Off interlock switch and indicators
- Additional back panel “Laser On” indicator
- Hot plug-in/out
- Local and remote status monitoring and management features

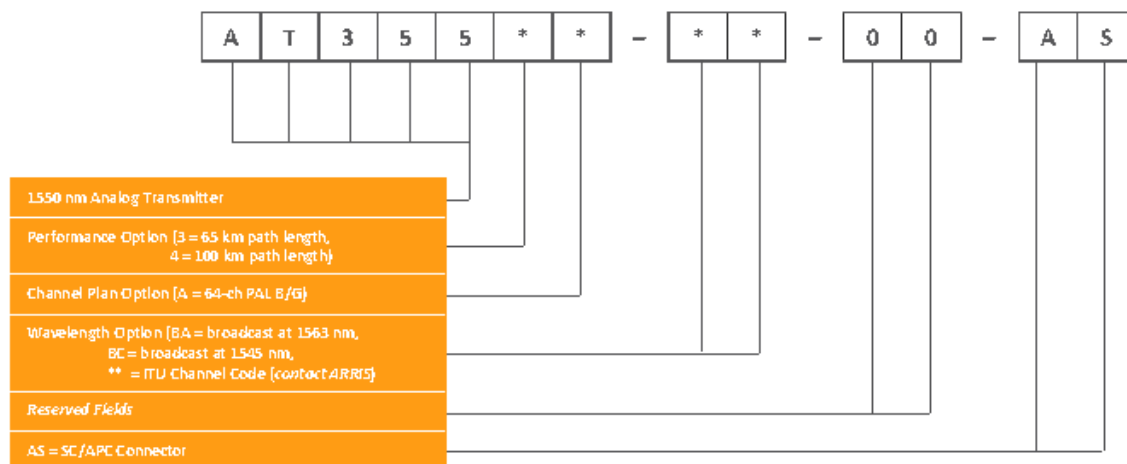
SPECIFICATIONS

PHYSICAL		ENVIRONMENTAL	
Dimensions	13.0" D x 4.3" H x 3.0" W (3RU)(33 cm x 11 cm x 7.6cm)(3 chassis slots wide)	Operating temperature range	0° to +50°C (32° to 122°F)
		Storage temperature range	–40° to +85°C (–40° to 185°F)
Weight	4.0 lbs (1.8 kg)	Humidity	5% to 95% non-condensing
RF AND OPTICAL INTERFACE		ELECTRICAL	
Wavelength	•1545.3 nm ±0.9 nm (Broadcast, “BC” models) •1563.0 nm ±0.9 nm (Broadcast, “BA” models) (DWDM ITU grid available by special order)	Passband	46-1002 MHz
Optical connector	SC/APC on standard back plate BP-A9	Nominal RF input levels (dBmV/ch, CW)	18 (Manual Mode) / 20 (AGC Modes)
RF input	F-type (female connector at back plate) BP-A9	Frequency response flatness (including slope)	± 0.5 dB (46 to 550 MHz), ±0.75 dB (46 to 1002 MHz)
RF test point	G-type (male connector at front panel - 20 dB)	Input return loss, minimum	17 dB
GENERAL		Level stability	± 0.6 dB
Channel plans	64-channel PAL B/G plus QAM loading up to 1002 MHz	AGC range	± 3dB
Specific link length	65 km or 100 km options	Manual gain control range	0 to -6.0 dB
Optical output power, minimum	9.5 dBm	Manual gain control step size	-.25 dB
Operating modes	Video and CW (both with AGC), and Manual (without AGC)		

POWER REQUIREMENTS	
Input voltage	12 VDC
Power consumption	< 40 W
STATUS INDICATORS, ALARMS AND MONITORING	
Front panel LEDs (Laser On/Off and Alarms)	
Local and remote status monitoring via ARRIS Opti-Trace applications	
Firmware download capability by local serial port	

Performance over Operating Temperature Range		NTSC	
		65 km (AT3553A **-*.**)	100 km (AT3554A **-*.**)
SBS Suppression, Variable	dBm	14-18	12-16
Carrier-to-noise Ratio (CNR) ¹	dB	53	51,5
Composite Second Order (CSO) ²	dB	67	65
Composite Triple Beat (CTB) In band (85-598 MHz)	dB	66	64
Cross Modulation (XMOD)	dB	65	64

ORDERING INFORMATION



Required Module Back Plate

(Included with order)

B	P	-	A	9
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