

# Bluebell

## Racketeer-12G



- Converts 12G-SDI to optical
- Compact design integrates without bulky hardware.
- Extends signals up to 10 km fiber.
- Plug-and-play setup, simple and efficient.
- Durable for live, studio, outdoor use.
- Reliable solution for broadcasters, AV professionals.

### Racketeer-12G/T and Racketeer-12G/R



The Racketeer-12G is a robust and versatile solution for high-performance electrical-to-optical and optical-to-electrical signal conversion. It supports a wide range of SDI standards, including 12G-SDI, 3G-SDI, HD-SDI, and SD-SDI, while also being compatible with ASI and MADI signals. Designed to handle data rates from 50 Mb/s to 12 Gb/s, it ensures reliable signal transmission for professional broadcast and production environments.

Equipped with integrated signal reclockers, the Racketeer-12G delivers enhanced performance by maintaining signal integrity over long distances. It supports both single-mode and multi-mode fibre configurations, allowing flexibility across various setups. Using a single-core optical fibre, the device achieves forward transmission of 12G-SDI video signals without delay or compression, maintaining exceptional signal quality over distances of up to 10 km in singlemode fibre or 300 meters in multimode fibre.

The compact design incorporates advanced features such as built-in serial clock recovery, signal equalisation, and line drive capabilities. Automatic signal detection ensures compatibility with multiple standards, including SMPTE ST2082-1, ST2081-1, SMPTE424M, SMPTE292M, SMPTE259M, SMPTE297M, SMPTE305M, and SMPTE310M. This makes the Racketeer-12G a reliable choice for demanding applications.

The aluminum housing enhances durability, offering corrosion resistance and excellent thermal and conductive properties, making it suitable for harsh operational conditions.

The Racketeer-12G delivers high-quality, reliable signal conversion for professional use, combining advanced functionality, robust construction, and precision engineering.

## Specifications

Fibre			
Wavelength	1310nm		
Rate	12Gbps		
Transmitter power	0~-3dB		
Receiver sensitivity	-12dB		
Fiber connector	ST		
Signal transmission distance	Multimode fiber, 300m Singlemode fiber, 10km		
Video			
Protocol standard	SMPTE ST-2082		
SMPTE rate	270Mbit/s,1.48Gbit/s,2.97Gbit/s,5.94Gbit/s,11.88Gbit/s		
Support standard (digital video format)	SMPIE 259M	SD-SDI	480i , 576i
	SMPIE 344M	ED-SDI	480P, 576P
	SMPIE 292M	HD-SDI	720P, 1080i
	SMPIE 424M	3G-SDI	1080P60Hz
	SMPIE ST-2081	6G-SDI	2160P30Hz
	SMPIE ST-2082	12G-SDI	2160P60Hz
EQ mode cable transmission distance	75m at 11.88Gbps		
	120m at 5.94 Gbps		
	200m at 2.97 Gbps		
	300m at 1.485 Gbps		
	600m at 270Mbps		
Signal amplitude	800mV±10%		
Impedance	75Ω		
Physical			
Enclosure	Aluminium alloy		
Product size	80*17*17mm		
Product net weight (unit: pair)	0.09KG		
Product weight (including the outer packaging)	0.2KG		
Input voltage	100VAC ~ 242VAC,50-60Hz		
Power supply	DC 5V		
Power dissipation	< 1.5W		
Overload protection	provided		
Over current protection	provided		



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