

Bluebell

Racketeer-12G



- Converts 12G-SDI to optical for
- 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 aluminium 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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