



Features

- » Extremely Wideband >20 GHz
- » Complete TX and RX Modules
- » High Dynamic Range
- » Customization Available
- » Fully Integrated Modules

Applications

- » Replaces Coax Cable
- » Radio Over Fiber
- » Radio Astronomy
- » Remote Antenna Sites
- » Phased Array Radar
- » EW/ECM
- » Optical Delay Lines
- » SATCOM

PHOTONIC SYSTEMS INC.

900Middlesex Turnpike
Building 5
Billerica, MA 01821
USA

Phone: 978-670-4990
Fax: 978-670-2510
psi.info@photonicsinc.com
www.photonicsinc.com

Description

The PSI-2600-20L Microwave Photonic Link series is a family of high-performance transmitters and receivers intended to replace coaxial cable or microwave repeaters for system application up to and beyond 20 GHz. Typically used in antenna remoting or RF/IF signal distribution applications, the PSI-2600 links are used in military systems, satellite communications, radio astronomy, optical delay lines, cellular/wireless systems and other RF related applications. The PSI-2601-20L link contains no RF amplifiers. The PSI-2602-20L link includes an RF pre-amplifier. The PSI-2603-20L link contains an RF post-amplifier. The PSI-2604-20L link contains both an RF pre-amplifier and RF post-amplifier. Custom performance, packaging and connector configurations are also available. **Please contact PSI for application specific requirements.**

RF Link Performance Summary

Parameter	PSI-2601	PSI-2602	PSI-2603	PSI-2604	Units
Operating Bandwidth	.045 - 20	0.1 - 20	0.1 - 20	0.1 - 20	GHz
Link Gain	-20	13	12	44	dB
Noise Figure	32	4	32	5	dB
Input IP3	22	-11	15	-19	dBm
Spur Free Dynamic Range	110	106	105	100	dB/Hz ^{2/3}
Gain Flatness	±5	±5	±5	±6	dB
	±0.5	±0.5	±0.5	±0.5	dB

Note: Typical RF link performance @ 10 GHz and 3m optical jumper

Ordering Information

PSI Part Number	Description
PSI-2601-20L	Microwave Photonic Link Includes: <ul style="list-style-type: none"> • PSI-2601-20UT Transmitter • PSI-2600-20UR Receiver
PSI-2602-20L	Microwave Photonic Link Includes: <ul style="list-style-type: none"> • PSI-2600-20AT Amplified Transmitter • PSI-2600-20UR Receiver
PSI-2603-20L	Microwave Photonic Link Includes: <ul style="list-style-type: none"> • PSI-2601-20UT Transmitter • PSI-2600-20AR Amplified Receiver
PSI-2604-20L	Microwave Photonic Link <ul style="list-style-type: none"> • PSI-2600-20AT Amplified Transmitter • PSI-2600-20AR Amplified Receiver

Note: See individual transmitter and receiver module data sheets for further information