



### Features

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

### Applications

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

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### Description

The PSI-1600-20L 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 20GHz. Typically used in antenna remoting or RF signal distribution applications, the PSI-1600-20L links are used in military systems, satellite communications, radio astronomy, optical delay lines, cellular/wireless systems and other RF related applications.

Custom RF performance, packaging, connectors and link gain configurations are possible. **Please contact PSI with your application needs.**

### RF Link Performance Summary

Parameter	1601-20L	1602-20L	1603-20L	1604-20L	Units
Operating Frequency	.045 - 20	0.1 - 20	0.1 - 20	0.1 - 20	GHz
Link Gain	-32	0	0	44	dB
Noise Figure	47	15	47	12	dB
Input 1dB Comp.	13	-20	12	-20	dBm
Input IP3	23	-11	21	-13	dBm
Spur Free Dynamic Range	100	98	99	97	dB/Hz <sup>2/3</sup>
Gain Flatness In any 100 MHz Band	±1.5	±4	±4	±6	dB
	±0.5	±0.5	±0.5	±0.5	dB

Note: Typical RF link performance specifications at 10 GHz using PSI-1600-20UR receiver module. Please see transmitter and receiver datasheets.

### Ordering Information

PSI Part Number	Description
PSI-1601-20L	RF Photonic Link <ul style="list-style-type: none"> <li>• PSI-1600-20UT Transmitter Module</li> <li>• PSI-1600-20UR Receiver Module</li> </ul>
PSI-1602-20L	RF Photonic Link <ul style="list-style-type: none"> <li>• PSI-1600-20AT Amplified Transmitter Module</li> <li>• PSI-1600-20UR Receiver Module</li> </ul>
PSI-1603-20L	RF Photonic Link <ul style="list-style-type: none"> <li>• PSI-1600-20UT Transmitter Module</li> <li>• PSI-1600-20AR Amplified Receiver Module</li> </ul>
PSI-1604-20L	RF Photonic Link <ul style="list-style-type: none"> <li>• PSI-1600-20AT Amplified Transmitter Module</li> <li>• PSI-1600-20AR Amplified Receiver Module</li> </ul>

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