



## Description

The PSI-6650 TIRx™ RF Front-end series of products are patented devices that permit high-isolation (> 50dB) routing of transmit and receive signals to and from the bi-directional antenna port. The PSI-6650 TIRx™ RF Front-ends include adjustment circuitry to maximize the T/R isolation between the TX in and RX out ports using the actual impedance of the attached antenna. The PSI-6650 also includes RF amplification for both the transmit and receive signal paths.

The PSI-6650 TIRx™ RF Front-end enables an RF system to simultaneously transmit and receive through a single antenna on the same frequency channel.

## Performance

Parameter		PSI-6650-030M	PSI-6650-450M	PSI-6650-002G
Operational Bandwidth		3 – 30 MHz	30-450 MHz	0.45 – 2.4 GHz
Instantaneous Bandwidth		> 100 KHz	> 100 KHz	> 100 KHz
TX /RX Isolation (Port 1 to 3)		< -50 dB	< -50 dB	< -50 dB
Transmit Path (Port 1 to 2)	TX RF Power (W)	≤ 2	≤ 2	≤ 2
	TX Gain (dB)	≥ 10	≥ 10	≥ 10
Receive Path (Port 2 to 3)	RX Gain (dB)	≥ 14	≥ 14	≥ 14
	RX NF (dB)	≤ 12	≤ 7	≤ 7
Mechanical		19" Rack Mountable		
Power Requirements		AC Supply		

## Contact

### PHOTONIC SYSTEMS INC.

900 Middlesex Turnpike  
Building 5  
Billerica, MA 01821  
USA

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

## Ordering Information

PSI Part Number	Description
PSI-6650-030M	30 MHz TIRx with Manual Adjusted Compensation
PSI-6650-450M	450 MHz TIRx with Manual Adjusted Compensation
PSI-6650-002G	2.4 GHz TIRx with Manual Adjusted Compensation
<b>Custom versions available, please contact PSI with your application specific requirements</b>	