



### **Applications**

- Cellular and PCS Antenna-Remoting
- Microwave Delay-Lines
- Frequency Distribution Systems
- Radar System Calibration
- Phased Array Antenna Systems

#### **Features**

- Integrates a high frequency photodiode and bias circuitry into a connectorized package
- 0.05 3 GHz bandwidth
- Wavelength operation covers both 1310 nm and 1550 nm bands
- Photocurrent monitoring circuit
- Ruggedized for operation in military or other harsh environments

# **Small Integrated Receiver Unit SIRU2300**

0.05 - 3 GHz

The Emcore Small Integrated Receiver Unit (SIRU2300) is a high-performance optical receiver with guaranteed performance over the 50 MHz to 3 GHz frequency band. The SIRU2300 is a fully integrated unit that contains both the high frequency photodiode and the control electronics. Only DC input voltages and the optical input signal are required for operation.

The unit can be used to construct transparent optical links for antenna remoting, microwave delay lines and other applications where it is necessary to transport RF and microwave signals over long distances without signal degradation.

The SIRU2300 is an ideal receiver to use with Emcore's high-performance directly modulated fiber optic transmitters.

## **Specifications**

#### **Electrical**

Frequency Range	0.05 to 3 GHz
Electrical Power Requirements	+15 V @ 60 mA max
Photodiode Monitor Output	1 V/mA
RF Connector	SMA (female)
RF Output Impedance	50 Ω

#### **Optical**

Wavelength	1300 – 1600 nm
Connectors	Diamond AVIM or FC/APC
Optical Output Power	+ 3 dBm maximum
Responsivity at DC at 1550 nm	> 0.8 A/W

#### **Physical**

Dimensions	1.0" H x 3.0" W x 4.0" D
Operating/Storage Temperature	-40 °C to +70 °C

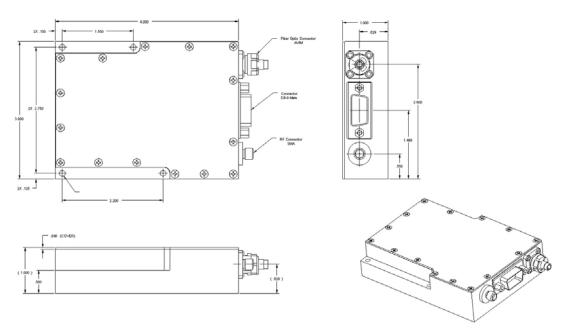
# **Ordering Information**

SIRU-2300-AV for Diamond AVIM connector

or

SIRU-2300-FA for FC/APC

## **Package Outline Drawing**



## **D-Connector Pin Out**

1	+15 V
2	n/c
3	n/c
4	GND
5	n/c
6	Photodiode Monitor
7	n/c
8	n/c
9	n/c

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# For more information on this and other products:

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