

OmniStar[®] GX2 Headend Optics Platform

GX2-RSW200B

Return Path RF Switch Module

FEATURES

- High-density, single-slot design can fit up to 16 modules in a 4RU OmniStar GX2 Housing
- Plug and play operation with blind mate RF connectors in the rear
- Quick-Swap capability allows replacement modules to be automatically configured to pre-stored settings
- Nonvolatile memory contains the module birth certificate
- Operating bandwidth from 5 MHz to 200 MHz for return path signals
- Field upgradeable firmware can be updated while the module remains in service



PRODUCT OVERVIEW

The OmniStar[®] GX2-RSW200B RF Switch Module is an essential component to the OmniStar GX2 platform for increasing reliability of voice, video, and data transmission. Designed specifically for the return path, this module provides a switching mechanism between primary and secondary RF signal sources and may be used in analog or digital applications. The GX2-RSW200B model has both Manual and Automatic modes of operation. Manual mode allows the user to switch between primary and secondary inputs through one of the three communication interfaces available with the OmniStar GX2 Platform. Automatic mode allows the switch to be controlled by optical levels when interfaced with OmniStar GX2 Return Path receivers. Automatic mode also includes Non-Revert and Revert functions. These functions offer the user the choice between having to manually switch a signal back to its primary source or using a selectable revert time to automatically switch back once a valid signal is restored at the primary source.

SPECIFICATIONS

RF Characteristics

Operational Bandwidth	5 – 200 MHz
Insertion Loss (All Ports)	1.5 dB Max, 5 to 200 MHz
Return Loss (All Ports)	18 dB Min, 5 to 200 MHz
Isolation Performance	–65 dB, 5 to 200 MHz
Input/Output Impedance	75 Ω
RF Output Test Point	20 dB Relative to the RF Output Port

Switching Characteristics

Switching Time	15 ms Max in Auto Mode
External Control Valid Input Resistance	2 k Ω to Ground
External Control Invalid Input Resistance	10 k Ω to Ground
Revert Time	10, 60, 600 Seconds

General

Operating Temperature Range	–20°C to +65°C (–4°F to +149°F)
Storage Temperature Range	–40°C to +80°C (–40°F to +176°F)
Dimensions	1" W x 5.9" H x 15" D (2.5 cm x 15 cm x 38 cm)
Weight	2.0 lb. (1 kg)
Mounting	GX2-HSG* Equipment Shelf

RF Connector Types

Input	F-type (using G-to-F adaptor on chassis)
Test Points	F-type
Power Consumption	2 W Typical
Visual Interface	Tri-color Module Status LED
Data/Control Interface	Serial Peripheral Interface (SPI) to Control Module

Note: The GX2-RSW200B is designed to be used with the GX2-RX200B X2 Dual Return Path Receiver.

Ordering Information

Model Name	Description
GX2-RSW200B	Return Path RF Switch

RELATED PRODUCTS

GX2 Chassis	Optical Patch Cords
Jumpers	Optical Passives
Power Supplies	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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