

# Product Bulletin

## Gigabit Uplink Module

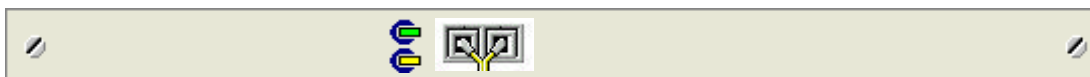
### Smart Ringswitch

Part Number – 58-49



### Key Benefits

- Compatibility
- Ease of integration
- Cost efficiency



**Smart Ringswitch Gigabit Uplink Module (58-49)**

### Key Features

- Efficient translational Layer 2 switching
- Jumbo frame support to 9Kb
- 1000BASE-SX compatible interface
- IEEE 802.3z compliant
- TrueView management support
- Supports dual host redundancy
- Spanning Tree loop avoidance

### Overview

Madge Networks is delivering on its commitment to provide a means for organizations to integrate their Token Ring network infrastructure with a Gigabit-class IP-oriented switched backbone.

The introduction of the Gigabit Uplink Module for the Smart Ringswitch family of Token Ring switches gives customers a simple and effective solution to provide 1000Mbps connectivity for any 4, 16 or 100Mbps Token Ring workgroup or backbone.

### Compatibility

#### Cable Lengths

The Gigabit Uplink Module has been designed and tested to meet the IEEE 802.3 1000BASE-SX specification for Ethernet at 1000Mbps over Multi-mode fiber-optic media .

Gigabit Module	62.5/125 <sub>m</sub> MMF	50/125 <sub>m</sub> MMF
1000BASE-SX	220m	500m

Support for extended cable distances (as specified in the 1000BASE-LX specification for long haul Gigabit connections) is possible using an external SX to LX transceiver. This extends maximum drive distances to:

Gig Module + Transceiver	50/125 <sub>m</sub> or 62.5/125 <sub>m</sub> MMF	10/125 <sub>m</sub> SMF
1000BASE-LX	550m	5,000m

### Interoperability

The Gigabit Uplink is compatible with any 1000BASE-SX compliant device.

In order to validate the range of applications supported by the Ringswitch Gigabit Uplink, the product has been tested with the following:

- 1000BASE-SX Ethernet adapters (Alteon, Intel)
- 1000BASE-SX Switches (Intel , Alteon 180/714)
- 1000BASE-SX Transceivers (Transition, First Fiber)

## Ease of integration

Unlike complex standalone Gigabit access technologies, the Ringswitch Gigabit Uplink is simple to install with configuration, diagnostics and control capabilities readily available via Madge Networks popular TrueView device management application.

As an integral part of the well-established Smart Ringswitch family, the Gigabit Uplink is optimized for use with Token Ring networks. It includes unique capabilities that are designed to minimize downtime and maximize data throughput, such as: jumbo frame support, RIF caching, SPT loop prevention and VLAN/priority field preservation.

*Madge Networks customers* can simply add a translational switching Gigabit port to their existing Smart Ringswitch Plus or Express Select configuration, by installing the module in an available option slot.

*Non-Madge customers* can also benefit from Madge Networks Gigabit integration technology, by complementing their existing equipment with the compact, yet powerful Smart Ringswitch Express Select. This 16-port switch is available with three option slots, into which the Gigabit Uplink module can be installed.

## Cost Efficiency

The forwarding performance of the translational switching engine ranges up to 100-150k pps, dependent on packet size. A fully functional translational switch port, this is an extremely competitive alternative to more complex and costly layer 3 standalone router-based solutions.

## Specifications

**Network type:** IEEE802.3 1000BASE-SX Ethernet

**Media:** SC connector  
Multi-mode Fiber (MMF)  
62.5/125 $\mu$  or 50/125 $\mu$

### Power consumption:

*Current:* 2.5A (max)

*Voltage:* +5V

**Ports:** One

**RIF Cache:** Up to 10,000 entries

### Dimensions (unpacked)

*Size:* 16.1 x 11.1 x 0.75"

480 x 285 x 22mm

*Weight:* 0.70Kg (module only)

### Operating environment:

*Temperature:* 32° to 104°F (0° to 40°C)

*Humidity:* 10-90% RH (non-condensing)

*Altitude:* 10,000 ft / 3,000m (maximum)

### Standards compliance:

*EMC:* FCC Class A; EN55022 Class A; EN50082-1

*Safety:* UL1950; IEC950; EN60950

*Y2K:* BSI DISC PD2000-1

*CE Mark:* Yes

## Configuration defaults

- Ethernet frame size (1,514 bytes) (optional 4,486 or 9,014 settings)
- Full duplex (fixed)
- IEEE802.3x Flow control (auto-negotiation)
- Spanning Trees (separate SPT for TR and E)
- Source Routing (disabled)
- RIF insertion (enabled)
- Ring Numbers for Uplink port (not configured)
- Translational switching for IP & IPX (enabled)
- IP multicast mode (defaults to functional address)
- 802.1Q priority tagging on Ethernet (disabled)

## Ordering Information

### Part No: Description

58-49 Smart Ringswitch Gigabit Uplink Module

## Availability

Supported by Ringswitch Software Release 4.3 and above

For more information on Madge Networks Token Ring or Wireless products visit [www.madge.com](http://www.madge.com)