

# Product Data Sheet

## Smart Ringswitch Plus

Token Ring Switch

Part Number – 57-61



### Key Benefits

- ❑ Cost effective integration of Gigabit, 10/100 Ethernet and ATM resources.
- ❑ Improves management and control of networks
- ❑ Increases flexibility of Token Ring networks
- ❑ Protects investment of existing infrastructure
- ❑ Boost performance with proven, industry leading, architecture

### HIGH CAPACITY BACKBONE TOKEN RING SWITCH

The Smart Ringswitch™ Plus is a high capacity, fully featured Token Ring Switch for highly resilient backbone applications.



#### HIGH CAPACITY

Madge's Smart Ringswitch *Plus* has the port count, switching capacity and performance needed in the network backbone. Able to switch from 4 up to 36 rings, it is ideal for large networks.

#### COMPLETE SWITCHING SOLUTION

Practical Token Ring networking issues go far beyond physical topology – to include cabling media, frame forwarding techniques, uptime requirements and management. The Smart Ringswitch *Plus* can be chosen with confidence because it has outstanding management functionality and the capability to fit into any Token Ring backbone application.

#### NON-STOP NETWORKING

Reliability is crucial in the backbone, and the Smart Ringswitch *Plus* has unique features to improve network uptime. As well as a backup power supply option, it provides redundant uplinks with fast recovery to protect against failures in the uplink or other network units. In addition, its Active Broadcast Control helps prevent protocol failures from stopping the network.

#### DESIGNED TO HANDLE THE PRESENT AND THE FUTURE

The Smart Ringswitch *Plus* is built to connect Token Ring networks to other LAN technologies and secure the benefits of higher bandwidth today. And for tomorrow, it has been built to accommodate future network trends, through software and hardware upgradability to third layer switching and quality of service features.

## **MADGE'S TOKEN RING SOLUTIONS FAMILY**

The Smart Ringswitch *Plus* is part of a product line that allows budget-friendly Token Ring solutions to be built from desktop to backbone – with industry-leading adapters and switching

### **SUPPORTING MIXED TOKEN RING AND ETHERNET DESKTOPS**

Madge backbone solutions support simultaneous Token Ring and Ethernet LAN Emulation services, allowing ATM resources to be commonly accessed by both types of network.

### **HIGH PORT DENSITY TOKEN RING SWITCHING**

The Smart Ringswitch *Plus* is a modular, six slot chassis switch supporting up to 36 switched Token Ring ports. The switch also supports 100Mbps Token Ring on copper or fiber, third layer services and 155M ATM modules for high performance inter-switch connections.

### **NON-BLOCKING SWITCHING PERFORMANCE**

The Smart Ringswitch *Plus* has a 1.5Gbps capacity backplane. This gives it the power to switch between up to 36 Token Rings, 16/4 and 100Mbps, 10/100 Ethernet, Gigabit and ATM uplinks. The Smart Ringswitch *Plus* is therefore ideally suited for large networks with centralized servers, and is the right choice for integrating Token Ring into a high-speed backbone.

### **LOW LATENCY AND HIGH THROUGHPUT**

Smart Ringswitch *Plus* implements cut-through switching, which reduces delays in the switch. The result is excellent workstation to server access rates, everywhere in the network. Additionally, any port on the Smart Ringswitch *Plus* can operate in full duplex dedicated Token Ring mode, allowing Token Ring frames to be sent and received simultaneously. Servers directly connected to the switch can take advantage of this operating mode, maintaining a double bandwidth pipeline between switch and server.

### **SOURCE ROUTE AND TRANSPARENT OPERATION**

Smart Ringswitch *Plus* supports all frame forwarding techniques including Source Route, Transparent, Source Route Transparent (SRT) and a unique mode: SRT plus. SRT plus combines Source Route and Transparent bridging to allow the same ring number to be used on multiple ports, making it easy to segment rings without needing to change

desktop ring numbering schemes throughout the network.

## **LEADERSHIP IN NETWORK MANAGEMENT**

Smart Ringswitch products are managed through graphical network management software available as part of Madge's TrueView/32 *Enterprise*™ management suite. Smart Ringswitch *Plus* fully supports the RMON management standard. All 10 groups (including the diagnostic Filter and Data Capture groups) are implemented in the switch placing it amongst the most manageable of all Token Ring switch solutions in the marketplace today. By supporting all monitoring groups, the Ringswitch can perform the function of a monitor probe, obviating the need to carry a probe device around the network when diagnosing problems. Alternatively, a port on the switch can be configured as a port mirror, allowing an administrator to set up a network probe in one place yet see activity on any of the Ringswitch *Plus* ports.

### **ACTIVE BROADCAST CONTROL**

A high level of broadcast traffic absorbs processing power in every workstation and can bring down the network in fault conditions. This wastes valuable resources and costs an organization time and money. The Smart Ringswitch *Plus* incorporates Active Broadcast Control (ABC) technology, which automatically eliminates unnecessary broadcast traffic from the network. ABC uses intelligent techniques, and is extremely easy to use. The software runs a process to learn the whereabouts of resources on the network. IP, IPX, NETBIOS and Source Route broadcasts are checked and forwarded only to the ports that need to see such broadcasts. The software can track or relearn the whereabouts of resources that move, so no configuration is necessary to keep ABC operating effectively.

### **COMPREHENSIVE VLAN SUPPORT**

Smart Ringswitch *Plus* provides for VLANs within Source Route and Transparent environments. Further, VLANS can be mapped between switches using either ring numbering for Token Ring connected switches or VLAN/ELAN mapping for ATM inter-switch backbones.

### **DUAL POWER SUPPLIES FOR RESILIENT OPERATION**

The Smart Ringswitch *Plus* chassis takes up to two power supply units. They can load share and in the event of one failing, the other will take over, maintaining continuous operation of the switch

## Modules and Accessories

Chassis and Power Supply Unit (57-61)

Switch-3 Module Switch Module (57-62)

100Mbps Module 8-port UTP/STP Copper (RJ45) (58-42)

100Mbps Module 8-port Fiber (SC) (58-43)

16/4Mbps Module 8-port UTP/STP Copper (RJ45) (58-24)

16/4Mbps Module 8-port Fiber (ST) (58-45)

Module 1000Mbps Gigabit Uplink (58-49)

Module 2-port 10/100Mbps Ethernet (58-44)

Module 2-port ATM155 Fiber Module (SC) (57-94)

Ringswitch Module Third Layer Services (58-41)

Power Supply Unit Power Supply Unit (57-77)

RMON License RMON License (84-27)

Smart Ringswitch Plus™ is the most flexible and fully featured switching solution for Token Ring networks. The 6-slot modular platform supports UTP/STP or fiber Token Ring switch ports and speeds of 16/4 or 100Mbps. Integrates Token Ring with Ethernet, Third Layer Services, ATM and Gigabit IP backbones

It is ideal for use for network backbone applications, where high levels of security, resilience and manageability are required. Enhanced traffic control functions, including automatic broadcast control and advanced protocol filtering options ensure maximum data efficiency and throughput for all demanding network environments.

### Gigabit Integration

As part of its Gigabit IP switching strategy, Madge Networks supplies a standards-based Gigabit uplink module to enable the integration of traditional switched 100/16/4 Token Ring networks with the Gigabit-class IP-oriented backbones. Supporting the efficient large frame sizes associated with Token Ring, Madge gigabit technology provides seamless scaling of Token Ring networks to Gigabit speeds, and permit the integration of Ethernet and Token Ring workgroups across a common layer 3 IP backbone.

For more information on Madge Networks Token Ring or Wireless products visit

[www.madge.com](http://www.madge.com)