

## Translational Switch Module



Olicom's CrossFire™ 8660 Translational Switch Module is a 2-port expansion module for the CrossFire 8600 and 8605 Token-Ring switches, and is designed to allow Token-Ring to Fast Ethernet networks to be quickly and cost-effectively interconnected.

A key element in Olicom's ClearStep™ strategy, the CrossFire 8660 enables you to use Layer 2 switching to seamlessly combine Token-Ring and Fast Ethernet technology, reducing the costs and complexity of network migration.

The CrossFire 8660 supports translational bridging for all key network protocols (SNA, IP, IPX, NetBios), all native Token-Ring features including source routing and VLAN tagging (IEEE 802.1Q), as well as all Token-Ring (100/16/4 Mbps) and Ethernet (10/100 Mbps) speeds.

An aggregate throughput of 150 Kpps means performance is a key feature of the CrossFire 8660, and combined with the unit's low cost, makes it a market-leading solution for switching between Token-Ring and Ethernet networks.

### Key Features and Benefits

- Supports SRT and SRB bridging
- IEEE 802.1q support enables frames belonging to different VLANs to be carried over the same physical link
- IEEE 802.1d support enables a Spanning Tree to be implemented on both Ethernet and Token-Ring networks, as well as IBM Spanning Tree on the Token-Ring side

- IP multicasts are translated to a single functional Token-Ring address or to multiple MAC Ethernet addresses
- IP fragmentation ensures fast, simple connections between IP, Token-Ring and Ethernet networks
- SNMP support allows standards-based device configuration via the LAN switch
- Out-of-band management and dedicated management program also included
- High availability
- Supports up to 63 VLANs
- Can uplink multiple switches in a stack
- Advanced RISC processor design maximizes performance and flexibility to accommodate future developments, protecting investment value

### Cost-effective Integration

The CrossFire 8660 is a simple and inexpensive solution to the challenge of connecting Token-Ring and Ethernet networks.

Installing a CrossFire 8660 in a CrossFire 8600 or 8605 Token-Ring switch enables data to quickly and easily flow between the two architectures – at up to 100 Mbps – while avoiding the complexity and expense of traditional solutions such as routers and standalone translational bridges.

All Token-Ring packets are translated into Fast Ethernet frames. This avoids the limitations of proprietary encapsulation techniques used by other products on the market.

*No problem.*

Typically the backbone will reside on Fast Ethernet with the clients attached to the Token-Ring switch, and the CrossFire 8660 as the high-speed link between the two. The Fast Ethernet ports can also act as trunk ports to FE switches or between separate switch stacks, while multiple VLANs on the same port are also supported.

This effectively removes the pressure to hastily implement an expensive migration from one technology to another, allowing you to leverage the value of your existing networks and accommodate emerging technology advances.

The CrossFire 8660 supports the same wide range of protocol filters as the CrossFire 8600 Token-Ring switch. Olicom has also equipped the CrossFire 8660 with support for "dual homed FEP" supporting duplicate MAC addresses in a source-route bridging Token-Ring network.

And being a frame-based solution, the CrossFire 8660 is complementary to ATM networks, enabling it to be easily linked to ATM via ATM uplinks on the Olicom's CrossFire 8600 and 8605 Token-Ring switches.

### Dedicated Processing Power

Two Field Programmable Gate Arrays (FPGA) and a dedicated RISC processor ensure the CrossFire 8660 offers the high-speed, low-latency performance needed to avoid creating a bottleneck at such a critical network junction.

Both generic and protocol-specific conversion options are included in the CrossFire 8660, ensuring the fastest and most efficient translation of frames.

## Specifications

### Hardware

#### Size

- Width: 138.4 mm (5.45")
- Depth: 206.2 mm (8.12")

**Power:** 4.1 A @ 5 volt DC or 21 Watt

**Operating temp.:** 10° to 40° C, (50° to 104° F)

**Humidity:** 8% to 80% non-condensing

**Storage altitude:** -300 to 3000 meters

**Cabling:** UTP5 with RJ45 connector interface

**Max. cable length:** 328 feet (100 m)

**MTBF:** 269,400 hours

### Performance

**No. of VLANs:** 63

**Destination lookup table size:** 15K

**RIF table source routed frames:** 12K

**Total performance:** 150 K pps

**Max. one way performance:** 150 K pps

**Address filtering rate:** 150 K pps

**Max. forwarding rate per Eth port:** 150 K pps

### Max. performance for IP

**fragmentation:** Full Fast Ethernet Bandwidth

### Network Management

- SNMP Management Application
- ClearSight™ Network Management System

### Standards Support

- IEEE 802.3 Ethernet
- IEEE 802.1d Spanning Tree
- IEEE 802.1Q Virtual Bridged LANs

### MIB Support

- RFC1213: MIB II
- RFC1493: Bridge MIB
- RFC1525: SR bridge MIB
- RFC1573: Evolution of Interfaces Group of MIB-II
- RFC1650: Dot3 MIB
- RFC1757: (RMON MIB)
- Olicom OC-8600 MIB
- Olicom CF-8660 MIB

### EMI Certifications

EN55022, CISPR 22, FCC Rules and Regulations part 15, subpart A

### Safety Certifications

UL 1950; C22.2 No. 950; EN 60950; EN50082-1

### Model Numbers

8660 0010: CrossFire 8660 Translational Switch Module

### Customer Support

#### Hotline Support

- USA: 800-OLICOM-1 or 972-516-4638, 24 hours a day, incl. holidays
- International: (+45) 45 27 01 02, between 8 a.m. and 6 p.m. CET Monday to Friday

See our Web site for more details about Olicom's extensive customer support services.

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