ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *3COM LANplex 6012* at our website: ***Click HERE***

LANplex Family
Switches

High-performance switches for enhancing bandwidth in Ethernet, Token Ring, FDDI, and heterogeneous LANs



3Com's LANplex 6000 (the 12-slot LANplex 6012 chassis is shown), LANplex 2500, and LANplex 2016 use advanced switching technology to scale bandwidth and maximize network performance. Switching options range from 10 Mbps Ethernet or 16 Mbps Token Ring to dedicated 100 Mbps FDDI connections, with Fast Ethernet and cell-based ATM switching available in the future.

3Com's LANplex® switches boost performance in collapsed backbones/data centers, departments, server farms, and workgroups while easing migration to higher speed technologies.

The LANplex 6000 series is a powerful intelligent switch for the data center that combines Ethernet and Token Ring LAN switching, switched FDDI, FDDI concentration, bridging between technologies, and intranetwork routing in one highly reliable modular unit. Both 4-slot and 12-slot models are available.

The LANplex 2500 departmental switch offers unparalleled price/performance in a modular, feature-rich Ethernet/FDDI platform. The LANplex 2016 is a modular, Ethernet-only switch for improving performance at the workgroup level. All three switches implement 3Com's powerful ISE-chip switching technology.

Key Benefits:

■ **Advanced switching.** The LANplex family supports rigorous client/server bandwidth demands with high-capacity switching architectures and leading-edge ASICs. The ISE (Intelligent Switching Engine) chips in LANplex products speed traffic at over 562,000 packets per second, delivering peak performance at low cost.

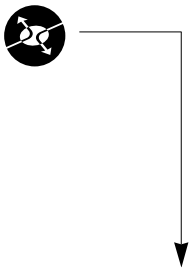
■ **Scalable performance.** LANplex switches boost performance by efficiently allocating bandwidth within LANs and seamlessly integrating Ethernet or Token Ring LANs with high-speed FDDI links. The LANplex 6000 and LANplex 2500 will also support switched 100BASE-T LANs and facilitate migration to ATM.

■ **Full-featured functionality.** Performance and configuration features include flexible, wide-ranging media choices, virtual LAN capability, packet filtering, Elastic Packet Buffering, and intranetwork routing.

■ **Comprehensive management.** The LANplex/Transcend Administration Console offers powerful management features, include a Roving Analysis Port for analyzing traffic on any segment from any LANplex switch on the network. All switches support 3Com's Transcend integrated management applications.

■ **Reliable operation.** Hot-swappable modules, optional redundant power, and robust, fault-tolerant design maximize uptime.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



Industry-Leading Performance, Flexibility, and Value

Whether your performance problems center on power users in workgroups, client-to-server bottlenecks in departments, or congestion on LAN backbones, the LANplex family provides you with practical solutions. LANplex switches offer leading-edge switching technology, a rich set of features, modular versatility, and a smooth migration path to higher-speed technologies.

The LANplex Family at a Glance

The LANplex 6000 delivers top-of-the-line switching, bridging, and routing, making it ideal as a high-speed switching and connectivity engine in the data center.

With the LANplex 6000, you get a multitechnology, multifunction switch that has the power to accelerate throughput across a 19.5 Gbps backplane functioning as a high-speed collapsed backbone or intranetwork link.

A built-in Fiber Distributed Data Interface (FDDI) connection links the LANplex 6000 to other backbones or switching hubs, and intranetwork IP routing lets you use switching to enhance performance in heavily subnetted networks without complicating management. High-speed 100 Mbps Fast Ethernet and Asynchronous Transfer Mode (ATM) modules will be available in the future.

Powered by dual processors and equipped with one of the most advanced networking ASIC chips in the industry, the LANplex 2500 and LANplex 2016 deliver unmatched price/performance and a full complement of advanced switching functions.

LANplex 2500 is your best choice for high-traffic departmental LANs, offering up to 16 switched Ethernet ports and two switched FDDI ports. Modules are available with all types of media connections. In the future, 100BASE-T Fast Ethernet or 155 Mbps ATM modules will be available.

The LANplex 2016 is an Ethernet-only switch designed for high-performance workgroups. Based on the same modular architecture as the LANplex 2500 and using the same Ethernet switching modules, the LANplex 2016 provides up to 16 switched Ethernet ports for connection to any of the Ethernet media types.

Leading-Edge Chip Technology

The application-specific integrated circuit (ASIC) technology that 3Com has implemented in the LANplex family pushes switching to new levels of price, performance, and functionality.

Combining Ethernet and FDDI switching, bridging, routing, and advanced network management, the ISE (Intelligent Switching Engine) chip in the LANplex 2500, LANplex 2016, and the LANplex 6000 Ethernet/FDDI Switching Module is one of the most sophisticated network ASICs available. It delivers an aggregate throughput in excess of 562,000 packets per second.

The result is full-wire-speed forwarding on all ports for all configurations—no exceptions. This high degree of functional integration on the chip also means that devices using the technology are simpler, less costly, and more reliable. ISE technology cuts latency to less than 25 microseconds (not including packet receive time), while providing complete packet integrity checking and translational bridging.

In addition, the ISE-chip provides Elastic Packet Buffering, a technique that combines static and dynamic buffer allocation. Static buffering guarantees a minimum number of buffers for every port, and dynamically allocates additional buffers as needed to prevent packet loss in the event of congestion.

Elastic Packet Buffering ensures that Ethernet-based clients can accept large data bursts from FDDI, 100BASE-T, or ATM-based servers. It also prevents a congested port from taking excessive buffer space from other switched ports. This minimizes dropped packets, even during periods of maximum congestion.

Virtual LANs

The LANplex virtual LAN capability lets you organize nodes into manageable groups that aren't dependent on physical location. With this feature, you can set up workgroups composed of members from various departments spread throughout the enterprise.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Virtual LANs simplify management by preserving subnetwork addresses and minimizing the effort required for adds, moves, and changes. This allows you to more easily match the network configuration to the evolving structure of your organization.

Managers have three options when configuring virtual LANs with LANplex products. *Port grouping* allows them to define broadcast domains and control traffic by creating groups of ports. This increases performance by limiting broadcasts, and also simplifies configuration. *MAC address grouping* restricts traffic down to the workstation level, creating secure groups without limiting access or slowing throughput. *IP routing* simplifies administration by letting managers use the existing IP subnet structure to define virtual LANs.

Powerful System Management

You can manage any LANplex switching hub using the LANplex/Transcend Administration Console. From this console you can access comprehensive statistics, run diagnostic self-tests, download software upgrades, and keep track of each switch's overall status. Easy-to-use menus provide an intuitive management interface.

For more sophisticated traffic management, the LANplex family offers a Roving Analysis Port feature that lets you use a network analyzer to scrutinize traffic from any switched Ethernet port on any LANplex device anywhere on the network. There is no limit to the number of Roving Analysis Ports per system.

Transcend Enterprise Manager simplifies network management with task-oriented, customizable tools. Real-time views of internal and external configurations provide you with a overview of each device's environment. The application also includes SMT 7.3 (FDDI Station Management) proxy MIB support.

Since they are Simple Network Management Protocol (SNMP) Management Information Base (MIB) compliant, LANplex switches can be administered with any SNMP based management system, including 3Com's Transcend Enterprise Manager for UNIX® running on either Sun's SunNet™ Manager or Hewlett-Packard's HP® OpenView® management platform.

LANplex 6000 Series

Built on a high-capacity 19.5 Gbps backplane comprising three FDDI rings, a 19.2 Gbps High-Speed Interconnect (HSI), and a dedicated system management bus, the LANplex 6000 Series consists of the 12-slot (LANplex 6012) and 4-slot (LANplex 6004) versions. Both are equipped with a LANplex Management Module (LMM) in slot 1. The other slots accommodate up to 3 or up to 11 optional connectivity modules.

A LANplex 6000 switch can provide Ethernet and Token Ring LAN switching, Ethernet/Token Ring to FDDI bridging, FDDI concentration, and internetwork routing for data center environments. LANplex 6000 accommodates 16 to 176 switched Ethernet mixed-media ports, 8 to 88 switched Token Ring twisted-pair ports, and 22 switched FDDI fiber or copper media ports.

Each module has its own processor, so performance scales directly with the addition of each module. Additionally, a fault in one module will not affect another. The LMM also has its own management processor.

With the LANplex 6000, you can:

- Segment Ethernet and Token Ring LANs and interconnect the segments at full network speeds to alleviate traffic bottlenecks and congestion
- Combine Ethernet and Token Ring switching with Ethernet-to-FDDI bridging to configure a high-speed collapsed backbone or high-performance intranetwork, thereby increasing throughput between segments
- Employ Source Route Transparent (SRT) bridging capability to integrate switched Token Ring segments with legacy Token Ring networks
- Use intranetwork IP routing to fit Ethernet switching into heavily subnetted LANs, providing multiple switched segments per subnet and multiple subnets per port
- Extend 100 Mbps FDDI connections to FDDI servers and workstations with FDDI concentration
- Aggregate bandwidth with switched FDDI by connecting the three FDDI rings on the backplane
- Maximize uptime with redundant power and hot-swappable modules

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Ethernet/FDDI Switching Module (EFSM)

Each LANplex 6000 Ethernet/FDDI Switching Module (EFSM) provides high-speed intelligent switching, IEEE 802.1d bridging, and intranetwork routing between up to 16 Ethernet segments and two FDDI segments.

State-of-the-Art Switching

- RISC processors combined with 3Com's ISE-chip deliver leading-edge, scalable performance enhancement. High-port-density, low-latency, single-hop switching transfers data at more than 562,000 packets per second per module
- Ethernet-to-FDDI translation bridging to the backplane or to an external FDDI interface enables seamless connectivity between the technologies
- Cyclic redundancy checking (CRC), alignment, and length validation on all packets prevents data errors
- Multicast/broadcast firewalls suppress performance-slowing broadcast storms
- User-definable packet filters can block or forward packets based on address, protocol, or bit patterns within the packet, optimizing traffic management

Scalable Bandwidth

- Two switched FDDI segments aggregate bandwidth between FDDI client/server networks and FDDI backbone networks
- Shared or dedicated Ethernet connections support a wide range of bandwidth needs and segment sizes
- Integrated FDDI switching reduces latency and hop count to keep performance high

Express Switching and Bridging Modes

- Express Switching mode optimizes switched LAN connections to single devices by eliminating packet flooding caused by address learning and aging
- IEEE 802.1d Bridging mode optimizes Ethernet links for larger networks by providing full address learning
- The module can learn up to 8192 MAC addresses in either mode
- Express Switching and Bridging modes can be mixed within the switching hub or network to accommodate various configurations
- Spanning Tree support ensures that only one active path exists between LANs in redundant configurations

Intranetwork IP Routing

- With the support of intranetwork routing, switching can be easily implemented in existing subnet structures and router architectures
- User-configured IP routing with Routing Information Protocol (RIP) supports multiple switched segments per subnet and multiple subnets per port. Ethernet switching is used within subnets and intranetwork routing is used between subnets to optimize throughput
- Router administration is simplified because you don't have to create new subnets to handle growth, or reassign IP addresses for each move or change
- Traffic to subnets may be routed on a per-port basis

Media Flexibility

The EFSM supports a range of media connections for optimum flexibility:

- 16 ports 10BASE-T (RJ-45)
- 16 ports 10BASE-T (RJ-21, 50-pin telco)
- 16 ports 10BASE-FL (FOIRL)
- 16 ports 10BASE2 (BNC)
- 8 ports 10BASE5 (AUI)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Ethernet Switching Module (ESM)

The LANplex 6000 Ethernet Switching Module (ESM) provides intelligent switching, IEEE 802.1d bridging, and intranetwork routing between up to eight Ethernet LANs and one of the FDDI backplane paths. The ESM transfers data at 50,000 packets per second, which provides line-speed throughput for frame sizes up to 1192 bytes. The ESM accommodates the same range of media connections as the EFSM, and offers many of the same features, including scalable bandwidth, Express Switching and Bridging Modes, and IP routing between subnets.

Token Ring Switching Module (TRSM)

The LANplex 6000 Token Ring Switching Module (TRSM) provides high-speed, high-density switching for up to eight Token Ring ports, as well as one FDDI ring connection. With this module, you can segment your Token Ring LANs cost-effectively and boost bandwidth for enhanced performance.

Support for SRT bridging allows the TRSM to be used in SNA environments that include dual Token Ring connections and multiple redundant paths for fault tolerance and load balancing.

The module represents a full featured, low-cost alternative to traditional Token Ring/LAN internetworking options such as two port bridges, or routers.

Scalable Bandwidth

- The module lets you scale bandwidth in both shared and dedicated Token Ring segments of various sizes
- The Token Ring FDDI connection alleviates traffic bottlenecks between Token Ring LANs and an FDDI backbone
- Two of the ports can be configured for direct station attachment, providing a dedicated high-speed link to an individual file server, minicomputer, or mainframe

Standards-Compliant Bridging and Routing

- SRT functionality—including both source routing and transparent bridging—ensures seamless integration into existing Token Ring networks
- Support for IEEE 802.1d and IBM® Spanning Tree preserves Token Ring integrity

Fault Tolerance

- CRC alignment and length validation on all packets prevents data errors

FDDI Concentrator Module (FCM)

The LANplex 6000 FDDI Concentrator Module (FCM) integrates FDDI workgroup and server concentration with LAN switching. The module provides six multimode fiber Master ports (M-ports) with ANSI-compliant SC connectors, or 12 Category 5 unshielded twisted- pair (UTP) master ports with RJ-45 connectors.

Port-Level Configurability

- Any port on an FCM can be connected to any of the three FDDI backplane rings, or the ports may be disabled
- Single-attach stations (SAS) can be connected to FCM ports, or dual-attach stations (DAS) can be dual-homed to FCM ports to provide fault-tolerance in case of failure

LANplex Management Module (LMM)

All LANplex 6000 switches come equipped with a LANplex Management Module (LMM). This module has a processor devoted entirely to system management. System software is stored in flash EPROM and may be updated over the network without interrupting LANplex 6000 operation.

Comprehensive Management Features

- Virtual LAN capability allows you to create workgroups independent of physical connections
- FDDI SNMP capabilities include FDDI SMT (Station Management) Revision 7.3 and an SNMP/FDDI SMT proxy that allows management of all the FDDI stations. Beacon filtering facilitates FDDI fault isolation
- The module supports an extensive set of MIBs: MIB II, Ethernet MIB, FDDI SMT 7.3 MIB, Bridge MIB, and LANplex management MIBs
- The module offers Ethernet and FDDI in-band management from any station and three out-of-band management ports: one Ethernet port and two serial ports
- Software updates can be downloaded via the in-band or out-of-band networks using ftp

Built-in FDDI Backbone Connection

- The module incorporates an FDDI DAS backbone connection that features standard multimode or optional Category 1 single-mode fiber interfaces
- The LMM offers a choice of one or three FDDI Media Access Controllers (MACs) for FDDI management. These come with A/B ports for standard Media Interface Connections (MICs)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Performance Migration with LANplex Switches

High-performance servers and client workstations can actually degrade the performance of traditional networks. The reason is that in client/server networks—where computing power is distributed to the desktop while data and common applications are centralized on servers—the network becomes a virtual computing backplane.

To cope with this problem, you need to maximize performance on your current LAN and at the same time prepare the way for easy migration to higher performance levels using new technology—a process called Performance Migration.

Currently your client/server network may only need Ethernet switching. But as bandwidth demand grows, you may want to connect your busiest servers with FDDI, leaving the client stations on small shared Ethernet segments to control costs.

As bandwidth demand increases, you can connect your switches with FDDI, beginning with a shared backbone and progressing to switched FDDI and ATM in the future.

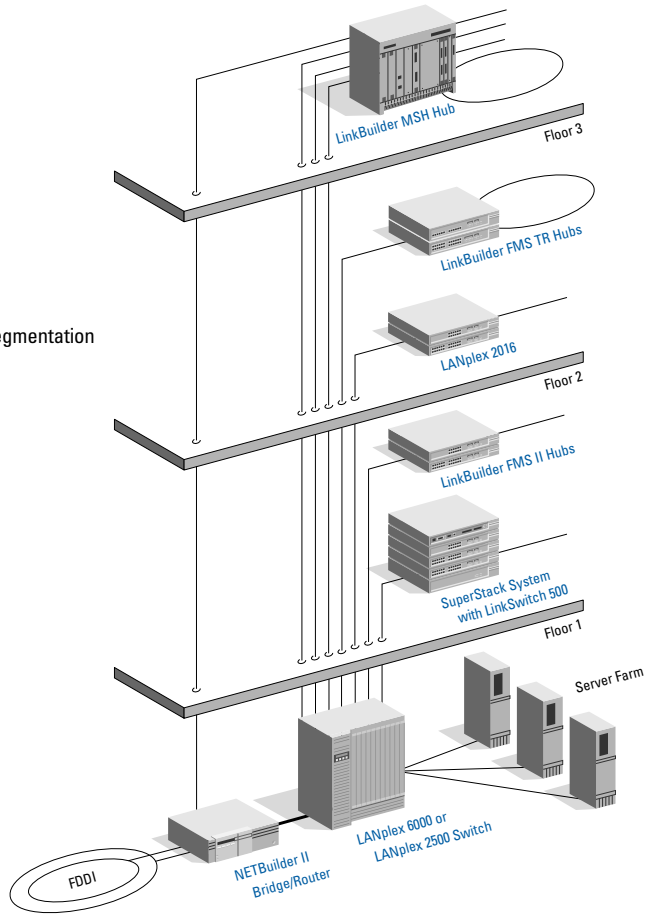
The diagrams show how you can use the three stages of 3Com's High-Performance Scalable Networking strategy to implement Performance Migration on your network.

HPSN Stage 1: LAN Segmentation

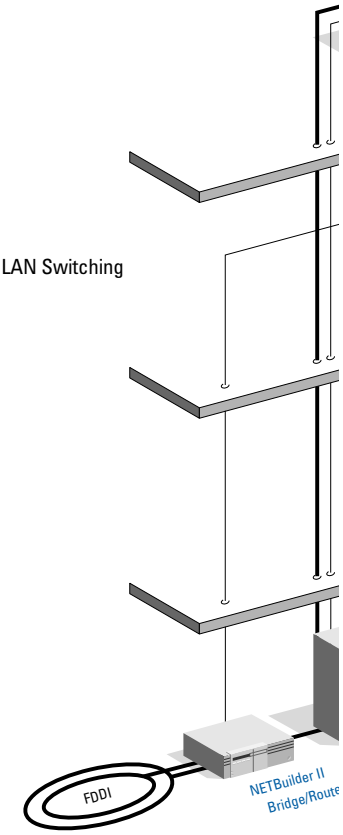
At this stage, a LANplex 6000 or LANplex 2500 is used as a collapsed backbone device for segmenting floor-wired LANs. Servers have been centralized in a server farm to improve manageability.

3Com LinkBuilder® FMS™ II stackable Ethernet hubs and LinkBuilder FMS TR stackable Token Ring hubs (both of which may be integrated in a SuperStack™ system) are used along with a LinkBuilder MSH™ multi-services hub to provide wiring concentration on the floors. A NETBuilder II® bridge/router provides enterprise backbone connections.

Stage 1: LAN Segmentation



Stage 2: LAN Switching



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

HPSN Stage 2: LAN Switching

At this stage in Performance Migration, Ethernet and Token Ring switching is implemented on the floors, providing full-rate networking on all ports. A LANplex 6000 provides high-speed FDDI connections to the server farm and switched Ethernet, Token Ring, or FDDI links to the floor hubs.

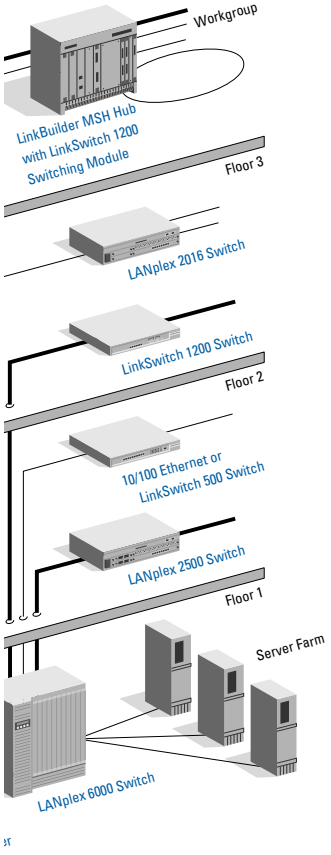
Switching on the floors may be accomplished by installing LANplex 2500 Ethernet/FDDI switches or LANplex 2016 Ethernet switches. For stackable workgroup switching, 3Com also offers the LinkSwitch™ 1200 Ethernet/FDDI switch, and the LinkSwitch 500 Ethernet-only switch. A LinkSwitch 1200 Switching Module may also be added to the LinkBuilder MSH hub.

HPSN Stage 3: ATM Switching

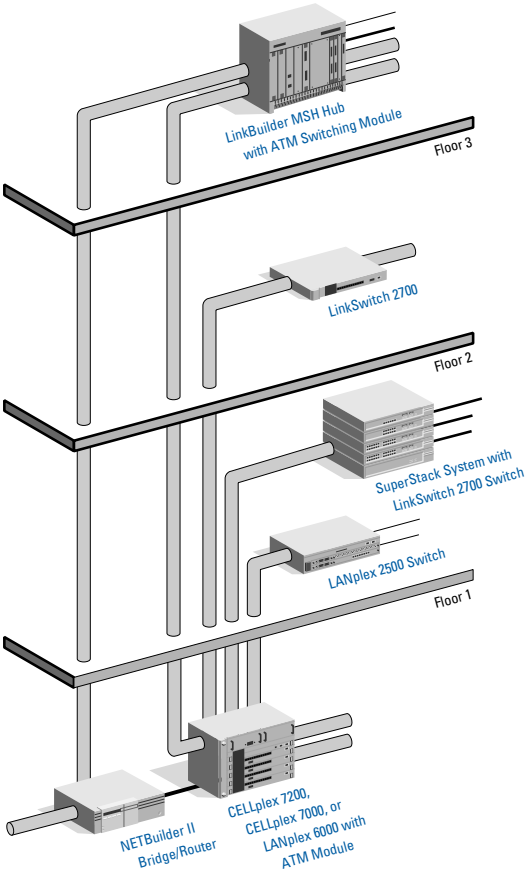
For very high performance, a 3Com CELLplex 7000 ATM or CELLplex 7200 Ethernet/ATM switch may be used as the backbone switch. LANplex 6000 will also accommodate ATM backbone connections.

3Com's CELLplex 7200 switch and LinkSwitch 2700 stackable Ethernet/ATM switch use 3Com's advanced *ZipChip*™ technology to seamlessly integrate Ethernet and ATM, allowing for easy migration. The LANplex 2500 switch and LinkBuilder MSH hub will also be able to handle ATM connections via ATM modules available from 3Com in the future.

With Stage 3 Performance Migration, you can install ATM wherever you need it in the enterprise. Virtual LANs may be deployed across LAN technologies, including the ATM networks.



Stage 3: ATM Switching



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

LANplex 2500

The LANplex 2500 Ethernet/FDDI switch offers unparalleled price/performance with ISE-chip technology that can speed throughput to more than 562,000 packets per second. The switch accommodates one or two 8-port Ethernet modules and up to two single-port FDDI/CDDI modules. Modules are available with all types of media connections. High-speed modules for 100BASE-T Fast Ethernet and ATM will be available in the future.

With the LANplex 2500, you can:

- Boost performance where it's needed with full-wire-speed forwarding on all switched ports for all configurations—no exceptions
- Set up high-speed connections to eliminate traffic bottlenecks to file servers and the backbone
- Prepare the way for migration to higher-speed technologies with a future-proof platform
- Maximize uptime with redundant power and hot-swappable modules

Full-Featured Intelligent Switching

- Elastic Packet Buffering prevents port congestion and minimizes dropped packets when traffic is heavy
- Packet filtering lets you control traffic flow based on characteristics you define, including multicast traffic, protocol type, or MAC address
- You can configure thresholds to control multicast/broadcast storms, with the filters based on any packet attribute
- IP Fragmentation allows FDDI packets greater than 1518 bytes to be forwarded to stations on an Ethernet segment. This technique also lets FDDI stations communicate most efficiently with each other using maximum size (4500-byte) packets

Express Switching, Bridging, and Intranetwork Routing

- Express Switching simplifies address learning and reduces packet flooding
- IEEE 802.1d Bridging mode optimizes Ethernet links for larger networks by providing full address learning
- Intranetwork IP routing supports multiple switched segments per subnet and multiple subnets per port. Routing may be enabled on a per-port basis

High-Speed Server and Backbone Links

- The switch can be equipped with up to two switched FDDI ports, delivering high-bandwidth connections to file servers and/or an FDDI backbone
- The switch's ASIC-based ISE-chip architecture will support other high-performance technologies implemented on future modules

Media Flexibility

The LANplex 2500 supports a wide range of media connections:

- 10BASE-T (RJ-45)
- 10BASE-T (RJ-21, 50-pin telco)
- 10BASE-FL (FOIRL)
- 10BASE2 (BNC)
- 10BASE5 (AUI)
- FDDI Fiber DAS
- FDDI twisted-pair DAS (TP-DDI)

The dual-attach (DAS) connectors allow you to add resiliency in case of FDDI ring failure. Also, DAS ports may be used for 2 single-attached connections.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Powerful System Management

- Virtual LAN capability gives you more flexibility in designing and managing your network, allowing you to define virtual workgroups independent of physical connections
- FDDI SNMP support include FDDI SMT (Station Management) Revision 7.3 and an SNMP/FDDI SMT proxy that allows management of all the FDDI stations
- The switch supports MIB II, Ethernet MIB, FDDI SMT 7.3 MIB, Bridge MIB, SNMP/FDDI MIB, and LANplex management MIBs
- Software updates can be downloaded via in-band and out-of-band networks using ftp

Uptime Assurance

- The ASIC-based switching architecture reduces component count and operational complexity, increasing reliability
- An optional redundant power supply provides a complete backup for the power unit in each switch

LANplex 2016

The LANplex 2016 provides up to 16 switched Ethernet ports using the same Ethernet switching modules as the LANplex 2500. It incorporates ISE-chip technology and most of the advanced Ethernet switching features found in the LANplex 2500. The same reliability features are also offered, including hot-swappable modules and an optional redundant power supply.

With the LANplex 2016, you can:

- Enhance bandwidth in workgroups and small departments with full-rate switching on all ports
- Benefit from high-end switching performance, flexibility, and reliability in an economical platform
- Manage with the full range of administrative features available for the LANplex family of products
- Maximize uptime with redundant power and hot-swappable modules

Robust Switching and Management

- The switch provides packet filtering, virtual LAN support, and a choice of Express Switching or IEEE 802.1d Bridging for exceptional switching flexibility and control
- You can manage the switch using all the capabilities of the LANplex/Transcend Administration Console. It also supports a full complement of SNMP MIBs as well as 3Com's Transcend Enterprise Manager for UNIX applications

Media Flexibility

The LANplex 2016 supports a range of Ethernet media:

- 10BASE-T (RJ-45)
- 10BASE-T (RJ-21, 50-pin telco)
- 10BASE-FL (FOIRL)
- 10BASE2 (BNC)
- 10BASE5 (AUI)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Specifications

LANplex Family Switches

LANplex 6000 Series

	LANplex 6012 Chassis	LANplex 6004 Chassis
Slots	12	4
Physical Dimensions		
Length:	16 1/2 in/41.9 cm	19 in/48.3 cm
Width:	19 in/48.3 cm	19 in/48.3 cm
Height:	17 1/2 in/44.5 cm	5 1/4 in/ 13.3 cm
Weight (fully loaded):	110 lb./49.9 kg	44 lb./ 19.9 kg
Environmental Ranges		
Operating		
Temperature:	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Humidity:	10% to 95% noncondensing	10% to 95% noncondensing
Storage		
Temperature:	-22° to 149° F(-30° to 65° C)	-22° to 149° F (-30° to 65° C)
Humidity:	95% max. noncondensing	95% max. noncondensing
Thermal Rating	1516 watts max. 5172 BTU/hour max.	720 watts max. 2463 BTU/hour max.
Safety		
Agency Certifications:	UL 1950, CSA 22.2 No. 220, IEC 950, TUV	UL 1950, CSA 22.2 No. 220, IEC 950, TUV
Designed to Comply with:	VDE	VDE
AC Protection:	20 amp circuit breaker	6 amp fuse
Over Temperature Protection:	Automatic warning at 131° F (55° C) Automatic shutdown at 158° F (70° C)	Automatic warning at 131° F (55° C) Automatic shutdown at 158° F (70° C)
Electromagnetic Emissions	Meets FCC part 15, Subparagraph J, Class A limits, and CISPR Class A limits	Meets FCC part 15, Subparagraph J, Class A limits, and CISPR Class A limits
Power Supply		
AC Line Frequency:	47 to 63 Hz	47 to 63 Hz
Input Voltage Options:	120 VAC; 90 to 132 VAC 220 VAC; 180 to 264 VAC	120 VAC; 90 to 132 VAC 220 VAC; 180 to 264 VAC
Current Rating:	120 VAC at 12 amps (max.) 220 VAC at 6.5 amps (max.)	120 VAC at 4.5 amps (max.) 220 VAC at 2.5 amps (max.)
Redundancy (optional):	Dual power supplies	N/A
Control Panel	4 buttons with 2 x 20 character LCD window	4 buttons with 2 x 20 character LCD window

Standards Supported in LANplex System

SNMP

SNMP protocol (RFC 1157)

MIB 2 (RFC 1213)

SNMP/FDDI MIB (RFC 1285)

Ethernet MIB (RFC 1284)

Bridging MIB (RFC 1286)

FDDI

ANSI X3T9.5 FDDI including revision 7.3 SMT

Software Installation

ftp (RFC 959)

Terminal Emulation

Telnet (RFC 854)

rlogin (RFC 1282)

Administration Protocols

UDP (RFC 768)

IP (RFC 791)

ICMP (RFC 792)

TCP (RFC 793)

ARP (RFC 826)

Ethernet/FDDI Switching Module (EFSM)

Software Requirements

LANplex system software release 4.1 or later

Standards Supported

IEEE 802.3, 10BASE-T, 10BASE-FL, 10BASE5, 10BASE2

IETF RFC 1042 including IP fragmentation for FDDI-to-Ethernet bridging

IEEE 802.1d MAC-layer bridging

Proposed IEEE 802.1H technical annex including AppleTalk® Phase II bridging

SNMP Management

Ethernet MIB (RFC 1284)

FDDI MIB (RFC 1285)

Bridging MIB (RFC 1286)

FDDI SMT Revision 7.3

Indicators

Module status, port status

Media Options

16-Port 10BASE-T Modules:

Connectors: RJ-45 or RJ-21, 50-pin Telco

Standard: IEEE 802.3 10BASE-T compliant

Cable Type: UTP cable, 85-115 ohm impedance, 22-26 AWG conductor size

Maximum Cable Length: 100 m

16-Port 10BASE-FL Module:

Connectors: ST connector send/receive pair for each port

Standard: IEEE 802.3 10BASE-FL compliant (FOIRL compatible)

Cable Type: 50/125 or 62.5/125 µm fiber-optic cable

Maximum Cable Length: 2000 m (50/125 µm) or 2375 m (62.5/125 µm)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Specifications *(continued)*

LANplex Family Switches

16-Port 10BASE2 Module:

Connectors: BNC

Standard: IEEE 802.3 10BASE2 compliant

Cable Type: RJ-58 thin Ethernet

Maximum Cable Length: 185 m

8-Port AUI Module:

Connectors: DTE (conforms to Mil-C-24308-1972)

Standard: IEEE 802.3 10BASE5 compliant

Token Ring Switching Module (TRSM)

Software Requirements

LANplex system software release 5.0

Standards Supported

IEEE 802.5 Token Ring

IEEE 802.1d MAC-layer bridging

SNMP Management

FDDI MIB (RFC 1285)

FDDI SMT Revision 7.3

Indicators

Module status, port status

Media Options

Connectors: 8 STP RJ-45 connectors

Standard: IEEE 802.5 compliant

Cable Type: STP cable, 85-115 ohm impedance, 22-26 AWG conductor size

Maximum Cable Length: 300 m

FDDI Concentrator Module (FCM)

Software Requirements

LANplex system software release 3.0 or later

Standards Supported

ANSI X3T9.5 FDDI, including revision 7.3 SMT

Indicators

Module Status, port status

Connectors and Cables

SC Connectors: 6 FDDI-standard SC connectors

SC Cable: 62.5/125 µm multimode fiber-optic cable

TP-DDI Connectors: 12 RJ-45 connectors

TP-DDI Cable: Category 5 UTP cable, as specified by ANSI X3T9.5 TP-DDI standard

LANplex Management Module (LMM)

Standards

ANSI X3T9.5 SNMP/SMT proxy

SNMP/FDDI proxy as defined by RFC 1285

Indicators

Module status (power/unseat, error condition/diagnostic failure) port status, system status, optical bypass

Connectors and Cables

RJ-12: One 6-pin D connector each for 2 ports

Ethernet Out-of-Band Port: AUI and RJ-45 port

FDDI A/B Ports: FDDI standard MIC

Optical Bypass Switch Control Cable: 6-pin DIN connector

FDDI Cable: Standard 62.5/125 µm 1300 nm multimode fiber-optic cable or 9/125 µm 1300 nm single mode fiber-optic cable

Single Mode Fiber Specifications

FDDI Signal Interface
Category Output: Category 1

FDDI Signal Interface
Category Input: Category 1

Output Power: -14 dBm max.;
-20 dBm min.

Receive Sensitivity: -14 dBm max.;
-31 dBm min.

Power Budget: -10 dBm min. (1 dBm allowed for reflection and dispersion penalties)

FDA Safety Class 1: Meets FDA regulation 21 CFR 1040.0 and 1040.11

IEC Safety Class: Designed to meet IEC Safety Class 1

Maximum Distance Coverage: 14.4 km (Note: This distance assumes cable with 0.4 dBm/km loss, 7 cable splices with losses of 0.15 dBm/splice, and 4 sets of mated connector pairs in the path with losses of 0.4 dBm per connector pair.)

LANplex 2500 and LANplex 2016

Physical Dimensions

Width: 19 in/48.3 cm

Height: 3 1/2 in/8.9 cm (2u)

Depth:14 3/4in/37.5 cm

Weight (fully loaded): 20 lb/9 kg

Environmental Ranges

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

Operating Humidity: 10% to 90% noncondensing

Storage Temperature: -22° to 149° F (-30° to 65° C)

Storage Humidity: Up to 90% noncondensing

Safety

UL 1950, CSA 22.2 No. 750-M89, TUV (EN 60 950)

Designed to comply with VDE

Over temperature warning at 140° F (60° C)

Electromagnetic Emissions

FCC Part 15J Class A; CISPR Class A

Power Requirements

AC Line Frequency: 47 to 63 Hz

Input Voltage Options: 120 to 220 VAC and 90 to 264 VAC

Current Rating: 120 VAC at 3.0 A (max.)/220 VAC at 1.75 A (max.)

Power Consumption: 340 W

Power Inlet: IEC 320, 2.2 (Type C14G)

Fuse Protection: 4 A

Heat Dissipation/Hour: 1164 BTU

Standards Supported

FDDI: ANSI X3T9.5 FDDI, including revision 7.3 SMT

SNMP: SNMP protocol (RFC 1157), MIB 2 (RFC 1213), SNMP/FDDI MIB (RFC 1512), Ethernet MIB (RFC 1398), Bridge MIB (RFC 1463), LANplex MIBs

Software Installation: ftp (RFC 959)

Terminal Emulation: telnet, rlogin

Administration Protocols: UDP, IP, ICMP, TCP, ARP

Indicators

Power, diagnostics, operating, processor, fan, temperature, configuration

Ethernet and FDDI Modules

8-Port Ethernet Modules (LANplex 2500 and 2016):

10BASE-T (RJ-45)

10BASE-T (RJ-21)

10BASE-FL (FOIRL)

10BASE2 (BNC)

4-Port Ethernet Module (LANplex 2500 and 2016):

10BASE5 (AUI)

Single-Port FDDI Modules (LANplex 2500):

FDDI DAS fiber MIC

TP-DDI DAS

Supports multimode fiber (MMF-PMD 62.5/125 µ)

Management Access

Dual RS-232 management port

Redundant Power

Optional redundant power is available for both switches for both the LANplex 2500 and LANplex 2016

Mounting

19-inch NEMA rack

Ordering Information

LANplex 6000 Chassis

LANplex 6012 12-slot chassis (single power supply)	3C6012-001
LANplex 6012 12-slot chassis (dual power supplies)	3C6012-002
LANplex 6004 4-slot chassis (single power supply)	3C6004-001

Ethernet/FDDI Switching Modules

LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-T, RJ-45; 2 FDDI ports to backplane)	3C6555-016R
LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-T, RJ-45: 2 FDDI ports, 1 to backplane, 1 to external TP-DDI SAS, RJ-45)	3C6555-116R
LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-T, RJ-45: 2 FDDI ports, 1 to backplane, 1 to external FDDI SAS, MIC)	3C6555-216R

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Specifications *(continued)*

LANplex Family Switches

3Com Corporation
P.O. Box 58145
5400 Bayfront Plaza
Santa Clara, CA 95052-8145
Phone: 800-NET-3Com
or 408-764-5000
World Wide Web site:
http://www.3com.com

3Com ANZA
ANZA East
Phone: 61 2 959 3020
ANZA West
Phone: 61 3 653 9515

3Com Asia Limited
Beijing, China
Phone: 8610 849 1380
Hong Kong
Phone: 852 2501 1111
Shanghai, China
Phone: 86 21 374 0220 Ext. 6115
Indonesia
Phone: 6221 523 9181
Korea
Phone: 822 732 4434
Malaysia
Phone: 60 3 233 6162
Singapore
Phone: 65 538 9368
Taiwan
Phone: 886 2 377 5850

3Com Benelux B.V.
Netherlands
Phone: 31 3402 55033
Belgium, Luxembourg
Phone: 32 2 716 4880

3Com Canada
Calgary
Phone: 403 265 3266
Montreal
Phone: 514 874 8008
Toronto
Phone: 416 498 3266
Vancouver
Phone: 604 434 3266

3Com European HQ
Phone: 44 1628 897000

3Com France
Phone: 33 1 69 86 68 00

3Com GmbH (Central Europe)
Phone: 49 89 6 27 32 0

3Com Ireland
Phone: 353 1 820 7077

3Com Japan
Phone: 81 3 3345 7251

3Com Latin America
U.S. Headquarters
Phone: 408-764-6462
Brazil
Phone: 55 11 505 2318
Chile
Phone: 562 633 9242
Mexico
Phone: 525 531 0591
Miami, Florida
Phone: 305-261-3266

3Com Mediterraneo
Milano, Italy
Phone: 39 2 273 02041
Rome, Italy
Phone: 39 6 5917756
Spain
Phone: 34 1 3831700

3Com Middle East
Phone: 971 4349049

3Com Nordic AB
Phone: 46 8 632 91 00

3Com South Africa
Phone: 27 11 803 7404/5

3Com UK Ltd.
Buckinghamshire
Phone: 44 1628 897000
Manchester
Phone: 44 161 873 7717

Ethernet/FDDI Switching Modules (continued)

LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-T, RJ-21 telco; 2 FDDI ports to backplane)	3C6555-016T
LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-FL, ST; 2 FDDI ports to backplane)	3C6555-016F
LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-FL, ST; 2 FDDI ports, 1 to backplane, 1 to external TP-DDI SAS, RJ-45)	3C6555-116F
LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE-FL, ST; 2 FDDI ports, 1 to backplane, 1 to external FDDI SAS, MIC)	3C6555-216F
LANplex 6000 Ethernet/FDDI Switching Module (16 Ethernet ports, 10BASE2, BNC; 2 FDDI ports to backplane)	3C6555-016B
LANplex 6000 Ethernet/FDDI Switching Module (8 Ethernet ports, 10BASE5, AUI; 2 FDDI ports to backplane	3C6555-008A

Ethernet Switching Modules

LANplex 6000 Ethernet Switching Module (8 ports, 10BASE-T, RJ-45)	3C6111-618R
LANplex 6000 Ethernet Switching Module (8 ports, 10BASE-T, RJ-21 telco)	3C6111-618T
LANplex 6000 Ethernet Switching Module (8 ports, 10BASE-FL, ST)	3C6111-618F
LANplex 6000 Ethernet Switching Module (4 ports 10BASE-FL, ST; 4 ports 10BASE-T, RJ-45	3C6111-614F
LANplex 6000 Ethernet Switching Module (8 ports, 10BASE2, BNC)	3C6111-618B
LANplex 6000 Ethernet Switching Module (4 ports, AUI)	3C6111-614A

Token Ring Switching Module

LANplex 6000 Token Ring Switching Module (8 ports, STP/UTP, RJ-45)	3C6408-000

FDDI Concentrator Modules

LANplex 6000 FDDI Concentrator Module (6 Master ports, multimode, SC)	3C6202-0000
LANplex 6000 FDDI Concentrator Module (12 Master ports, UTP, RJ-45)	3C6203-0000

LANplex Management Modules

LANplex 6000 Management Module (1 MIC, 1 MAC)	3C6301-001
LANplex 6000 Management Module (1 MIC, 3 MACs)	3C6301-003
LANplex 6000 Management Module, Multimode and Single Mode (Port A: single mode; Port B: multimode via 1 MIC, 3 MACs)	3C6301-101
LANplex 6000 Management Module, Multimode and Single Mode (Port A: single mode; Port B: multimode via 1 MIC, 1 MAC)	3C6301-103
LANplex 6000 Management Module, Multimode and Single Mode (Port A: multimode; Port B: single mode via 1 MIC, 1 MAC)	3C6301-011
LANplex 6000 Management Module, Multimode and Single Mode (Port A: multimode; Port B: single mode via 1 MIC, 3 MACs)	3C6301-013
LANplex 6000 Management Module, Single Mode (1 MIC, 1 MAC)	3C6301-111
LANplex 6000 Management Module, Single Mode (1 MIC, 3 MACs)	3C6301-113

Software

LANplex 6000 System Software	3C96100

LANplex 2500 and LANplex 2016 Chassis

LANplex 2500 (single power supply)	3C250100
LANplex 2500 (dual power supplies)	3C250200
LANplex 2016 (single power supply)	3C201610
LANplex 2016 (dual power supplies)	3C201620

Ethernet Modules

Ethernet Module (8 ports, 10BASE-T, RJ-45)	3C201000
Ethernet Module (8 ports, 10BASE-T, RJ-21)	3C201100
Ethernet Module (8 ports, 10BASE2, BNC)	3C201200
Ethernet Module (4 ports, 10BASE5, AUI)	3C201300
Ethernet Module (8 ports, 10BASE-FL, FOIRL)	3C201400

FDDI Modules (LANplex 2500)

FDDI Module (1 port, DAS fiber MIC)	3C200100
TP-DDI Module (1 port, DAS TP-DDI)	3C200300

Bypass Switch (LANplex 2500)

FDDI Multimode Optical Bypass Switch	3C92001

©3Com Corporation 1995. To learn more about 3Com products, visit our World Wide Web site at http://www.3com.com. All rights reserved. 3Com is a publicly owned corporation (NASDAQ:COMS). 3Com, LANplex, LinkBuilder, and NETBuilder II are registered trademarks, and CELLplex, FMS, LinkSwitch, MSH, SuperStack, Transcend, and ZipChip are trademarks of 3Com Corporation. AppleTalk is a registered trademark of Apple Computer, Inc. HP and OpenView are registered trademarks of Hewlett-Packard Company. IBM is a registered trademark of International Business Machines Corporation. SunNet is a trademark of Sun Microsystems, Inc. UNIX is a registered trademark of X/Open Company Limited.

All specifications are subject to change without notice.

Printed in U.S.A.

400270-001 4/95

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP