



Application Solutions for PTTs & Enterprise Network Operators

Your Network is our Business

Effectively employing networking technology has become a key factor in developing a successful business. Communications networks have emerged as valuable assets that generate revenue and provide competitive advantage. General DataComm has helped many of the world's largest Enterprises harness the power of networking. Electronic channels of commerce have been established, and reliable public and private communication links are essential to any organization's survival. GDC's full range of products and services can support this growing network challenge.



innovX[®] Family of Access Solutions

GDC has developed and introduced the InnovX family of products for use in Enterprise applications. GDC's new InnovX family of products deliver high quality, security and flexible features typically found only in PTT products for use in Enterprise environments. In most cases, InnovX uses common blades for installation in enclosures ranging from a single-blade standalone to a high-density, 16 - blade rackmount enclosure. This flexible approach simplifies network deployment and dramatically reduces costs associated with network maintenance and sparing. *Fig 1*

innovX[®] FastRoute

InnovX[®] FastRoute extends IP connectivity for Enterprise users providing flexible options and exceptional remote management and network security at a fraction of the cost of traditional methods. When deployed in enterprise networks, the InnovX FastRoute extends internal IP networks and simplifies network management and administration. The versatile and feature-rich InnovX FastRoute can be configured for LAN extension or as a router eliminator with E1 or G.SHDSL WAN interfaces. Management options include HP[®] OpenView, SNMP, Telnet, and HTTP. Optionally, InnovX FastRoute can provide management of remote devices using its 8-port Terminal Server as well as report alarm conditions to a security service. Out-of-band management (OBM) is available with an integral V.34 modem.

**Figure 1: INNOVX FastRoute Card:
StandAlone and Rack-mount Options**

**INNOVX 1000
(1-slot Enclosure)**



**INNOVX TwinPak
(2-slot Shelf)**



**INNOVX MultiPak
(10-slot Enclosure)**



Shown with: INNOVX FastRoute cards
INNOVX FastSwitch cards
Other INNOVX products
Power Supply

Not Shown: INNOVX High Density Shelf (16 Slots) See Page 3

innovX[®] FastSwitch 9/18

InnovX[®] FastSwitch provides robust Ethernet switching for applications where high quality, high-reliability, security and low-cost are needed. InnovX FastSwitch is scalable and expands in 9 - or 18 - port increments. The 9 - port unit occupies a single slot while the 18 - port occupies a double slot. InnovX FastSwitch reduces collisions and eases congestion problems on existing shared-hub networks. InnovX FastSwitch devices can be monitored and managed using standard protocols including HP[®] OpenView, Telnet, SNMP and HTTP. InnovX FastSwitch also features GDC IronGate Security, which provides port-by-port MAC address filtering. For additional security during periods of heightened alert, SNMP and web access may be disabled.

innovX[®] LanLink Async 1600

InnovX[®] LanLink Async 1600 is designed for high density applications where asynchronous data transfer over private IP networks is required. The InnovX LanLink Async 1600 is scalable in 16 port increments. A single InnovX LanLink Async 1600 can scale to 32 ports over a one Ethernet uplink simply by adding an InnovX LanLink 1600 EXP module. Async data ports are independently configurable and can operate at speeds from 300 - 115,200 bps. In addition to asynchronous data ports, each InnovX LanLink module supports up to 8 alarm contact input ports and 2 alarm contact output ports. Management is supported via craft port, SNMP or HTTP interface. Security features include GDC Irongate and TACACS+ authentication is supported.

innovX[®] LanLink Serial 300

InnovX[®] LanLink Serial 300 is designed for high applications where synchronous or asynchronous data transfer over private IP networks is required. The InnovX LanLink Serial 300 supports three universal serial ports. Each data port is independently configurable and can operate at speeds from 300 - 115,200 bps async or at speeds to 2.048 Mbps synchronous. In addition to data ports, each InnovX LanLink module supports up to 8 alarm contact input ports and 2 alarm contact output ports. Management is supported via craft port, SNMP or HTTP interface. Security features include GDC Irongate and TACACS+ authentication is supported.

innovX[®] FastSwitch 24

InnovX[®] FastSwitch 24 is an Ethernet switch that provides performance and features for supporting LAN based enterprise applications. The InnovX FastSwitch 24 delivers 24 - 10/100 Mbps Ethernet ports plus 2 up-link Ethernet ports. The up-link ports are available in standard 100 - Base - FX, 1000 - Base-T, as well as SX (multimode) and LX (single-mode) plug-in modules. The InnovX FastSwitch 24 has an 8.8 Gbps switching capacity and each uplink port is individually configurable. The plug & play InnovX FastSwitch 24 is easy to install and manage. Advanced features include RADIUS security, SNMP and RMON. InnovX FastSwitch 24 is provided as a standalone only.



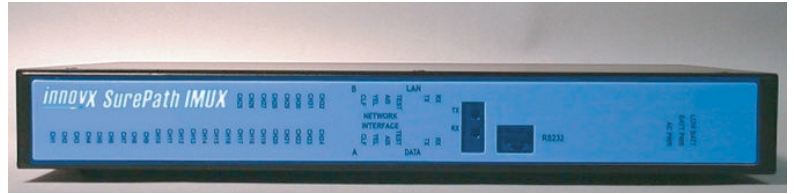
innovX[®] FastSwitch 24

innovX[®] SurePath V.34

InnovX[®] SurePath V.34 was specifically designed for businesses requiring a high degree of reliability in their data connections. Its a high-performance, V.34 modem that operates over the switched network, or as a private line modem with automated dial restoral. InnovX SurePath V.34 transmits synchronous or asynchronous data at speeds up to 33.6Kbps and with advanced compression techniques, can achieve an effective throughput of up to 64 Kbps in synchronous and 128 Kbps in asynchronous applications. The InnovX SurePath V.34 provides Steadfast[®] security to protect your dial access and can be managed locally or remotely using InnovX View software.

innovX[®] SurePath IMUX

InnovX[®] SurePath IMUX offers the ultimate in cost effective, feature-rich modularity, specifically designed to keep pace with today's evolving networks and emerging technologies. As communications networks become more versatile, equipment deployed today must be flexible enough to grow into these new configurations. InnovX SurePath IMUX can provide a voice and data mux with 24 FXS channels, or be deployed as a full 32 channel voice and data universal broadband integrator. The InnovX SurePath IMUX supports dual T1/E1 or xDSL ports, FXS/FXO/DPT/DPO analog ports (8 cards with 4 ports each), SNMP management, Ethernet, and simultaneous operation of T1/E1, DSL, ATM, and IP.



innovX[®] SurePath IMUX

innovX[®] View Manager

InnovX[®] View Manager is a management blade that allows integration of management interfaces to all InnovX devices in a shelf, to a common integrated management system. InnovX View Manager provides LAN access on a 10/100 Ethernet port and uses a single IP address to manage up to 32 access devices. The InnovX View Manager also acts as a RADIUS client server for access to all blades in a shelf via V.34 dial access.

innovX[®] View Software

InnovX[®] View Software provides the IP management function for the InnovX family of products. InnovX View Software configures monitors and tests InnovX units at both local and remote locations. InnovX View Software provides a graphic image of the product being managed with real-time indicators so the network manager can see the remote product being managed. InnovX View Software is integrated for use with HP[®] OpenView.



innovX[®] High Density Shelf

Lan Wan Access

Flexible

Secure

Managed

LAN / WAN Access Solutions

	innovx[®] FastRoute E1	innovx[®] FastRoute G.s	innovx[®] SurePath V.34	innovx[®] SurePath IMUX
Product				
Data Rates	2 - 10/100 Base T Ethernet Ports Rates to 2.048 Mbps 8 Terminal Server or Alarm Ports 1 Craft Port	2 - 10/100 Base T Ethernet Ports Rates to 4.6 Mbps 8 Terminal Server or Alarm Ports 1 Craft Port	Async to 128 Kbps Sync 2400 bps to 33.6 Kbps V.32bis, V.32, V.22bis, V.22, V.21	FX0/FXS Nx56/64 Kbps Where: N= 1-32 DS0s 10/100Base-T Ethernet Voice over Broadband//VoIP
Compatibility	E1 (G.703, G.704)	G.shdsl (ITU-T G.shdsl)	Synchronous Asynchronous	E1 SDSL/HDSL2/G.shdsl
Operating Mode	LAN Extension Static Routing	LAN Extension Static Routing	Switched Network or 2-/4 wire private line; with optional dial restoral (ADR in V.34, V.32bis and V.32 only)	Network Interface Modules Two per chassis
User Interface	ANSI/IEEE 802.3 Async V.24/V.28 TIA/EIA-232	ANSI/IEEE 802.3 Async V.24/V.28 TIA/EIA-232	TIA/EIA-232 or optional V.35 or TIA/EIA-530	V.35 on DB-26 Connector Voice Channels via 64 pin Amphenol
Highlights	SNMP Managed HTTP Interface GDC IronGate Security High Density Plug & Play Optional V.34 Modem Low Power	SNMP Managed HTTP Interface GDC IronGate Security High Density Plug & Play Optional V.34 Modem Low Power	SNMP Managed GDC Steadfast [®] Security RADIUS Flash Memory High Density Plug & Play Low Power	SNMP Managed Battery Backup Up to 32 Analog FXS Channels Simultaneously handles pt-to-pt E1 and Frame Relay
Packaging	InnovX 1000 InnovX TwinPak InnovX MultiPak InnovX HD	InnovX 1000 InnovX TwinPak InnovX MultiPak InnovX HD	InnovX 1000 InnovX TwinPak InnovX MultiPak InnovX HD	Standalone Only
Part Numbers	Rackmount: 200P032-002 Standalone: 200A032-022	Rackmount: 200P034-002 2 Wire 200P034-001 4 Wire Standalone: 200A034-022 2 Wire 200A034-002 4 Wire	Rackmount / Standalone Country Dependent	Standalone: S-200A220-001

Flexible

Secure

Managed

Ethernet Switching Solutions

	<i>innovx[®]</i> <i>FastSwitch 9</i>	<i>innovx[®]</i> <i>FastSwitch 18</i>	<i>innovx[®]</i> <i>FastSwitch 24</i>
<i>Product</i>			
<i>Data Rates</i>	9 - 10/100 BaseT Ethernet Ports 1 Craft Port	18 - 10/100 BaseT Ethernet Ports 1 Craft Port	24 - 10/100 BaseT Ethernet Ports 1 Craft Port
<i>Compatibility</i>	Ethernet 10/100 Base T 802.3	Ethernet 10/100 Base T 802.3	10/100 Base FX 10/1000 Base T 10/1000 Base SX 10/1000 Base LX GBIC
<i>Operating Mode</i>	Ethernet LAN	Ethernet LAN	Ethernet LAN
<i>User Interface</i>	ANSI/IEEE 802.3 Async V.24/V.28 TIA/EIA-232	ANSI/IEEE 802.3 Async V.24/V.28 TIA/EIA-232	ANSI/IEEE 802.3 Async V.24/V.28 TIA/EIA-232
<i>Highlights</i>	SNMP Managed Http Interface GDC IronGate Security High Density Plug & Play Multiple Uplinks Low Power	SNMP Managed Http Interface GDC IronGate Security High Density Plug & Play Multiple Uplinks Low Power	SNMP Managed Http Interface RADIUS Security High Density Plug & Play Multiple Uplinks Low Power
<i>Packaging</i>	InnovX 1000 InnovX TwinPak InnovX MultiPak InnovX HD	InnovX MultiPak InnovX HD	Standalone Only
<i>Part Numbers</i>	Rackmount: 200P033-002 Standalone: 200A033-001	Rackmount: 200P033-001 Standalone: Use InnovX MultiPak or InnovX HD Shelf	Standalone: S-200A220-001

Flexible

Secure

Managed

Industrial Ethernet Solutions

	<i>innovX® LanLink Async 1600</i>	<i>innovX® LanLink 1600 EXP</i>	<i>innovX® LanLink Serial 300</i>
Product			
Ports & Data Rates	16 - Async Data Ports Independently Configurable 300-115,200 bps 8 - Alarm Contact Input Ports 2 - Alarm Contact Output Ports 1-10/100 BaseT Ethernet Port 1 Craft Port	Expands InnovX LanLink Async 1600 to 32 Ports Independently Configurable 300-115,200 bps	3 Universal Serial Ports Independently Configurable Async 300-115,200 bps Sync to 2.048 Mbps 8 - Alarm Contact Input Ports 2 - Alarm Contact Output Ports 1 - 10/100 BaseT Ethernet Port 1 Craft Port
Link Compatibility	Ethernet 10/100 Base T 802.3	Utilizes LanLink Async 1600 Ethernet 10/100 Base T 802.3	Ethernet 10/100 Base T 802.3
Operating Mode	Ethernet LAN	Ethernet LAN	Ethernet LAN
User Interfaces	ANSI/IEEE 802.3 Async V.24/V.28 TIA/EIA-232	Async V.24/V.28 TIA/EIA-232	ANSI/IEEE 802.3 V.35, TIA/EIA530 Async V.24/V.28 TIA/EIA-232
Highlights	SNMP Managed HTTP Interface GDC IronGate Security TACACS+ High Density Plug & Play Low Power	SNMP Managed HTTP Interface GDC IronGate Security TACACS+ High Density Plug & Play Low Power	SNMP Managed HTTP Interface GDC IronGate Security TACACS+ High Density Plug & Play Low Power
Packaging	InnovX 1000 InnovX TwinPak InnovX MultiPak InnovX HD	InnovX MultiPak InnovX HD	InnovX 1000 InnovX TwinPak InnovX MultiPak InnovX HD
Part Numbers	Rackmount: 200M016-001 Standalone: 200A046-001	Rackmount: 200M047-001 Standalone: Use InnovX MultiPak or InnovX HD Shelf	Rackmount: 200M048-001 Standalone: 200A048-001



General DataComm

The Best Connections in the Business

General DataComm WORLD HEADQUARTERS: Naugatuck , Connecticut, USA 06770 Tel: 1-203-729-0271 Fax: 1-203-729-3013 <http://www.gdc.com>

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