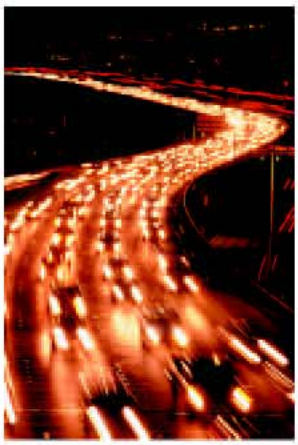
DYMEC DynaStar
NETWORKS FOR INDUSTRY

Hardened Networking Products for Utilities, Carriers and Industrial Networks

DYMEC-DynaStar provides a family of edge networking products specifically built for the rigors of power utility sub-stations, carrier central offices and other distributed industrial environments. Capabilities span distributed network requirements from integrated switching, routing and WAN access services, to local area Ethernet switching and connectivity, to serial- and Ethernet-over-fiber links. All products are available "sub-station hardened" to perform reliably where commercial equipment will not survive.

The DYMEC-DynaStar Network Integration System (NIS) combines the features of a WAN/LAN switch, terminal server, access concentrator, and router in a single modular platform. The NIS provides local connectivity and network access for all the devices and protocols within industrial sites. NIS is particularly suited for SCADA and OSS applications, supporting a wide range of legacy, special purpose and leading-edge interfaces.

Ethernet Switch Systems (ESS) and Optical Stars (OS) provide enormous flexibility to create point-to-point, hub, star, ring and cascaded physical topologies over wire or fiber within industrial installations using Ethernet or serial interfaces, respectively. The ESS includes advanced security and class of service features to assure application-specific performance within an integrated Ethernet LAN architecture.



Serial and Ethernet Fiber Link products extend data signals over fiber optics to provide reliable data networking in harsh environments where electrical isolation is required. Fiber Links support a variety of data signal types and may be used in standalone pairs or interconnected with fiber ports of other DYMEC-DynaStar products.

Together, the DYMEC-DynaStar product family extends and integrates the edge of the modern industrial network. DYMEC-DynaStar networking products are backed by a powerful set of management tools, customer-focused support services, and the DYMEC-DynaStar heritage in networking. Built to the demanding standards of industrial utilities, they have proven reliability and flexibility in melding legacy and emerging requirements into a single real-world solution.

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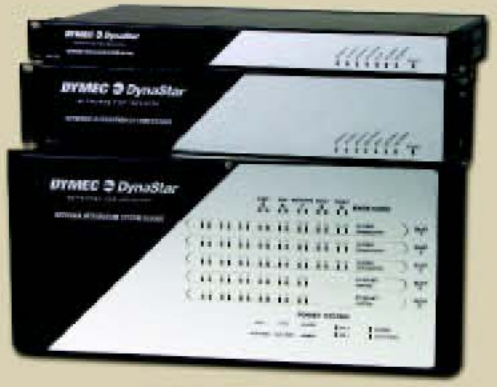
Simple, Reliable Solutions

Network Integration Systems

The NIS combines LAN/WAN switching, routing and terminal server capabilities in a single hardened platform. NIS is available in three model sizes and a variety of physical and functional configurations, all with a common software base.



NETWORK INTEGRATION SYSTEMS
PRODUCT BROCHURE PB-NIS

DS100, DS100i, DS100e
5-21 PORTS

DS2000, DS2000H
5-37 PORTS

DS500, DS5000
5-85 PORTS

Highlights:

- LAN/WAN switching, routing and terminal server
- Frame relay, X.25, IP and TDM WANs
- Async, PPP, TL1, BX.25, Ethernet
- Flexible protocol mediation
- Security for VLAN, VPN, RAS
- Integral CSU/DSU for DDS or T1/E1
- Contact closure alarms
- Substation hardened and NEBS certified

Ethernet Switch Systems

ESS provide high performance Ethernet connectivity in harsh environments where commercial products cannot survive.

Feature Highlights:

- 8, 16 and 24 port configurations
- Copper, SM fiber, MM fiber or mixed
- Optional dual Gigabit Ethernet uplinks
- Secure VLAN per 802.1d
- Multiple classes of service
- Rapid Spanning Tree
- Managed or unmanaged
- Substation hardened

ETHERNET SWITCH SYSTEMS
PRODUCT BROCHURE PB-ESS

for Industrial Networking

Optical Stars

OPTICAL STARS
MODELS OS5/OS9
TECHNICAL BULLETIN TBOS59

Optical Stars provide a connectivity solution for distributing serial data interfaces throughout a site. Stars provide either a master/slave star configuration or peer-to-peer connectivity among subtending serial devices. Stars interoperate with Fiber Links and may be used in standalone or cascaded configurations.

Ethernet and Serial Fiber Links

4 CHANNEL RS232 SERIAL
MODELS 5941/5942
TECHNICAL BULLETIN TB 5941

SINGLE CHANNEL RS232 SERIAL
MODELS 5843/5844
TECHNICAL BULLETIN TB 5843

SINGLE CHANNEL RS232 SERIAL
MODELS 5845/5846
TECHNICAL BULLETIN TB 5845

10 BASE-T TO BASE-FL
MODELS 3340/3350
TECHNICAL BULLETIN TB3340

Fiber Links extend and isolate electrical signals in harsh environments. Substation-hardened to C37.90 and P1613, they draw station power, operate at –40° to 85° C, and are designed for 20 year life at 85° C.

Products act as either Links or Repeaters and may be used standalone or in combination with other DYMEC-DynaStar MM and SM fiber products.

100 BASE-T TO 100 BASE-FX
MODELS 3440/3450
TECHNICAL BULLETIN TB3440

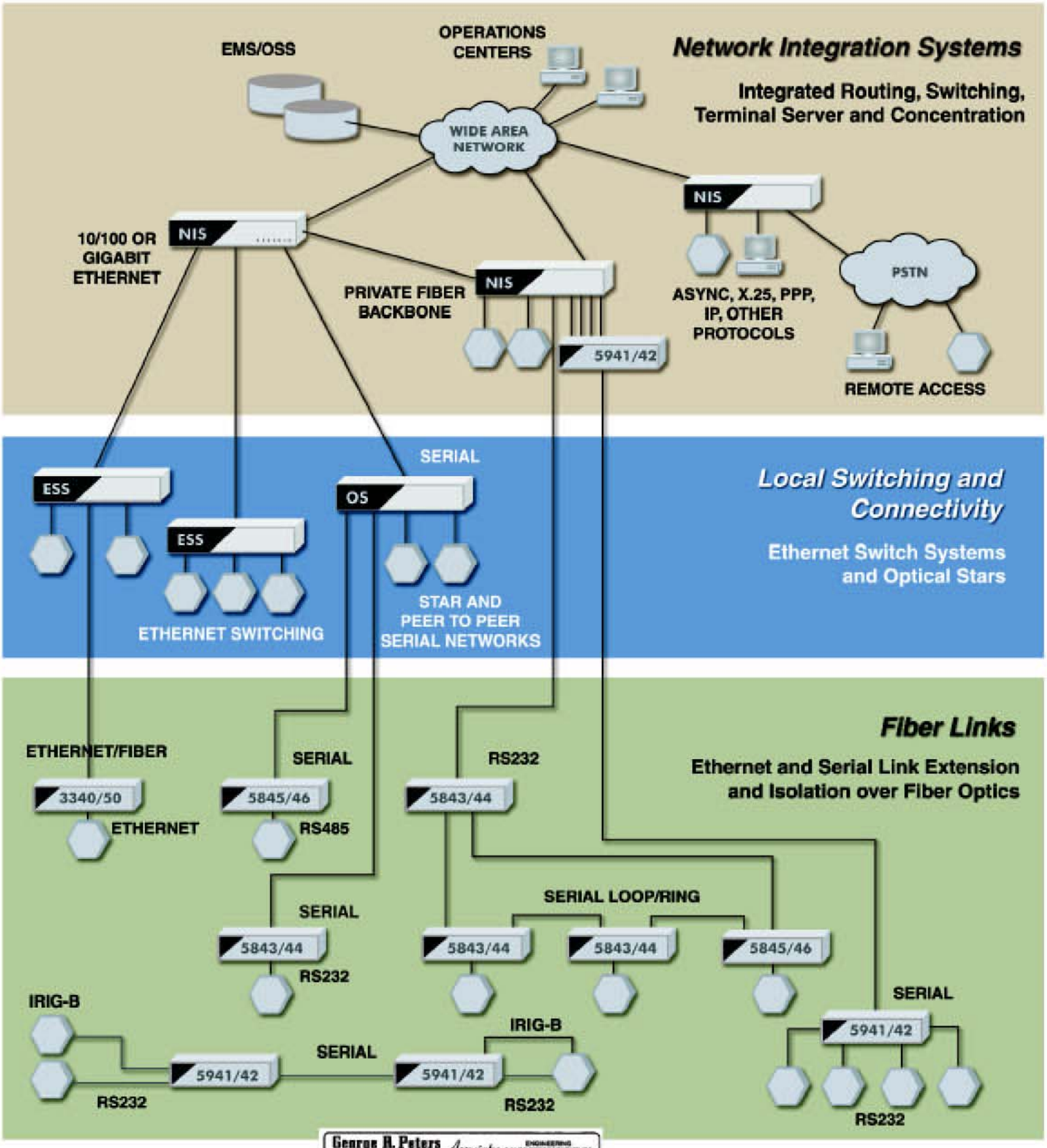
Link Chassis

For high concentrations of Links, the rack-mounted Chassis provides an efficient powering option for up to 15 Serial and/or Ethernet Link Cards.

15 SLOT POWER CHASSIS
MODEL 3900 CHASSIS
TECHNICAL BULLETIN TB3900

ETHERNET AND SERIAL CARDS
FOR 3900 CHASSIS
TECHNICAL BULLETIN TBCH-S

INDUSTRIAL NETWORK SOLUTIONS



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DOCUMENT NO. 4-61-0004-00