

TURBO

Product Family

IP Enabled Multi-Protocol Switches and Concentrators

- **IP/Cellular/Wireless backhaul of legacy data over IP Networks**
- **Supports up to 15 protocols concurrently over Ethernet**
- **Configure protocols on a port-by-port basis**
- **Easy to use Menu-driven Software**
- **SNMP manageable**
- **Supports Frame Relay and X.25 at data rates up to 1.544/2.048 Mbps (T1/E1)**
- **Optional integrated line monitor support and X.32 secondary backup link**
- **Node configuration is preserved in case of power failure**

The diverse communications needs of organizations today require solutions that can effectively integrate established network application and industry specific protocols into modern IP based networks.

NSGDatacom's TURBO products are designed to switch, concentrate and transport industry-specific data efficiently over packet based networks such as TCP/IP, Frame Relay and X.25. The TURBO products support native implementations of a variety of transaction protocols for point of sale, utility (SCADA), telemetry and lottery systems as well as a wide range of other legacy protocols such as SNA, Bisync, Asynch, Uniscope, Burroughs Poll Select and more. Protocols are software selectable on a port-by-port basis and are true protocol emulations. This accommodates for delays which might otherwise cause timeouts or other protocol specific problems when transmitting over packet-based networks.

TURBO products provide true conversion between different communications protocols and standards. Local polling in legacy host and terminal modes optimizes efficiency over cellular, wireless and satellite networks and adds additional flexibility to land-based Internet, Intranet and private line connections. TURBO platforms are available in ranging from 3 to 72 ports per chassis with integrated SNMP support an extensive network management functions.

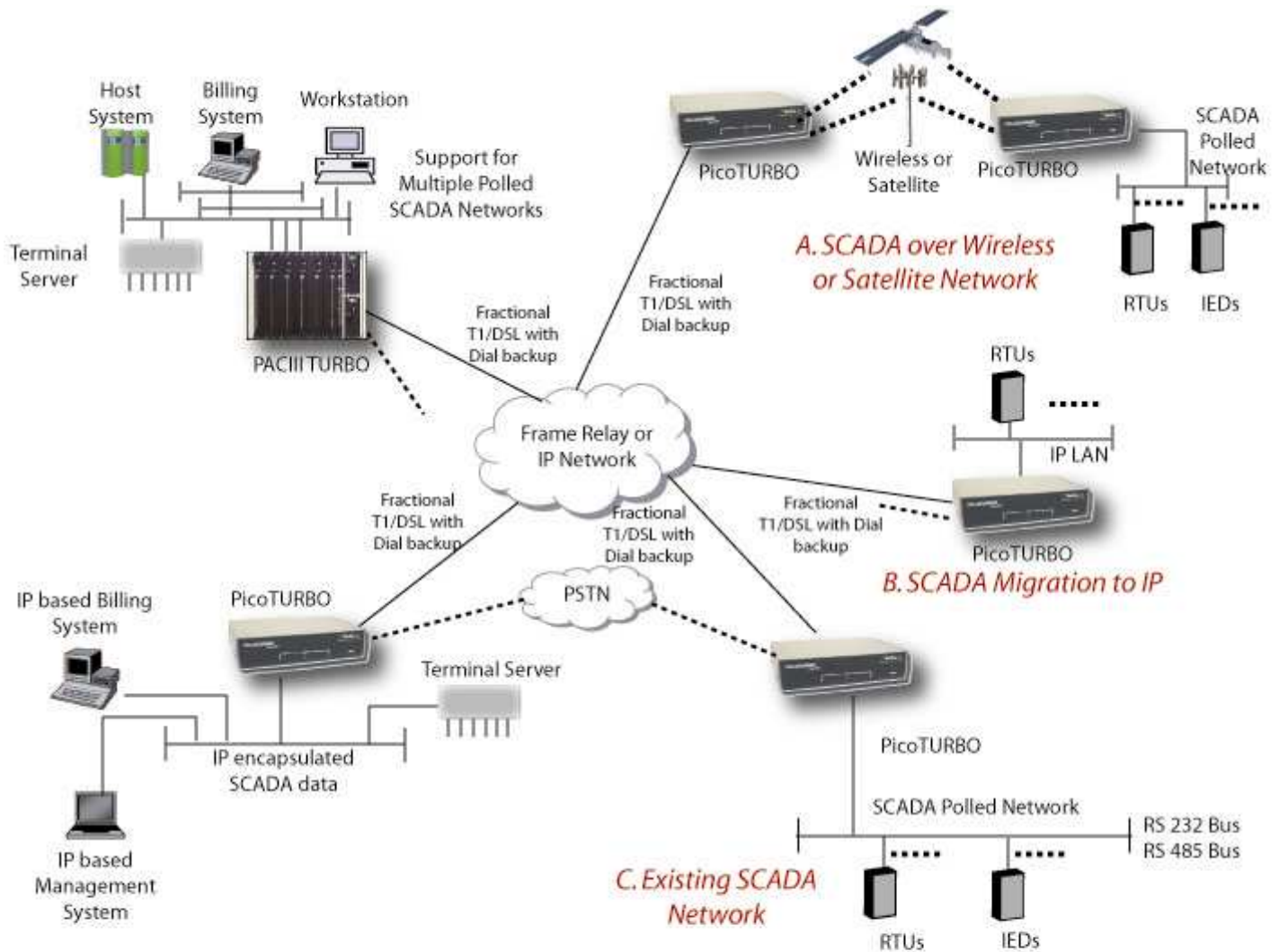
Depending upon network requirements the TURBO products can be configured with integrated ISDN, cellular, wireless modem, analog modem, or CSU/DSU modules. All platforms use the same operating software, providing seamless interoperability and supporting a limitless range of network configurations. The TURBO's software layered structure is designed for flexibility and ease of product deployment. A single platform may be configured to support switching, multi-protocol concentration, PAD or FRAD functions. NSGDatacom's feature rich TURBO product line provides cost-effective solutions to meet the dynamic demands of present and future wide area network designs.

Our TURBO products are installed in Carrier and Enterprise companies worldwide. Customers include: Telenor/Comsat, AT&T, MCI/Worldcom, Telekom Malaysia, Stratos-Global, St. Peterburg Telegraph among many others.



Communication solutions from
NSGDatacom
extend. evolve. innovate.

Utility Application



SCADA Host Systems

SCADA Power Utility Sites

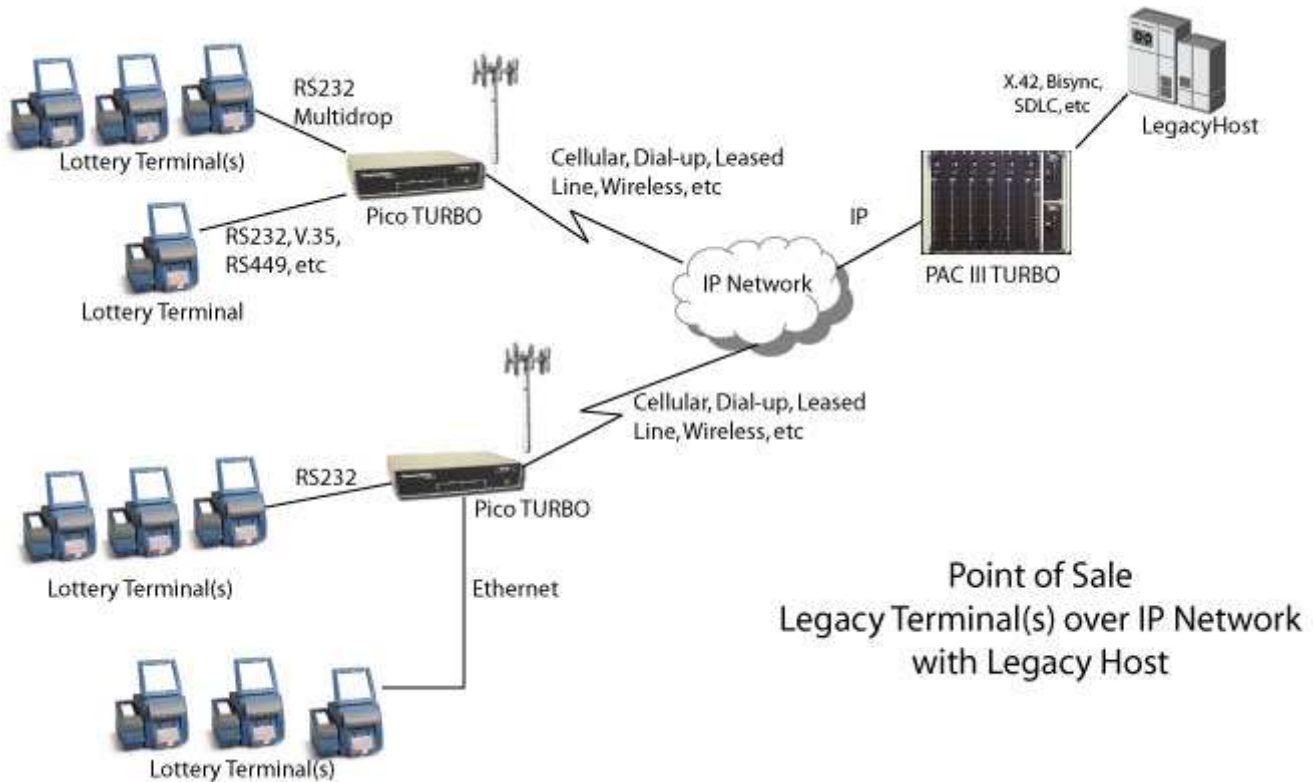
The NSGDatacom TURBO product line provides an ideal solution for reliably and securely transitioning SCADA equipment onto modern packet based networks. TURBO products directly support SCADA multi-drop circuits and various versions of the SCADA protocol in native mode. Polling delays caused by the network are prevented from occurring and thus potential time-out problems between the RTU's, IED's and the SCADA host management system are eliminated. The store and forward mechanisms of the TURBO products guarantee error free delivery of every message.

The TURBO product line can replace existing leased line connections of a SCADA with frame relay or IP based connections across private or public networks. Communications from multiple SCADA multi-drop segments can be aggregated onto a single network connection with automated backup for increased reliability and security. Automatic backup links may be via dial, wireless, or secondary network connections

The TURBO family of products supports the use of satellite and/or wireless connections, which may further reduce costs or provide services in remote areas not serviced by terrestrial facilities. Network Management via SNMP allows easy installation operation and maintenance. Sophisticated network management tools allow, configuration, diagnostics, reporting, and alarms to be centrally managed.



Lottery Application



NSGDatacom's TURBO products are designed to provide a smooth migration to IP based connectivity while retaining existing host and terminal equipment. The TURBO product line supports a wide range of protocols used by legacy lottery systems such as X.42 (including manufacturer specific variants), SNA, Bisynch, Frame Relay, X.25, TCP/IP and XOT (RFC 1613). Most importantly, the TURBO product line includes enhanced proprietary multi-drop and native spoofing modes of operation, which reduce network latency and speed up transaction times over terrestrial, wireless and satellite networks.

NSGDatacom

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