# SPECTIF SOLO

## Setting a New Standard in Remote Network Management

**Innovative Ideas for Telecommunications Service Providers**

**TSB**

## A Tradition of Effectiveness

Introducing Spectíf™ Solo, the newest member of TSB International's family of remote access/network data collection products.

With more than 35,000 units in use worldwide, TSB's AT and CC hardware products have set the standard for effective alarms, traffic and CDR data handling. In a crowded marketplace, AT and CC products are distinguished by their innovative use of distributed intelligence -- in the form of downloadable switch-specific software and programmable handling/logging options -- that allow service providers to achieve consistent results managing remote, multi-vendor network equipment.

Spectíf Solo moves this tradition of effectiveness forward. Solo combines the robust AT Plus and CC Plus feature sets on a powerful platform that uses the VXWorks™ embedded operating system powered by a Pentium™ processor. Solo simplifies and economizes network access and operations through browser enabled TCP/IP communications over dial-up voice, Ethernet or ISDN facilities. Solo supports the SNMP management standard for multi-vendor alarm handling and reporting.
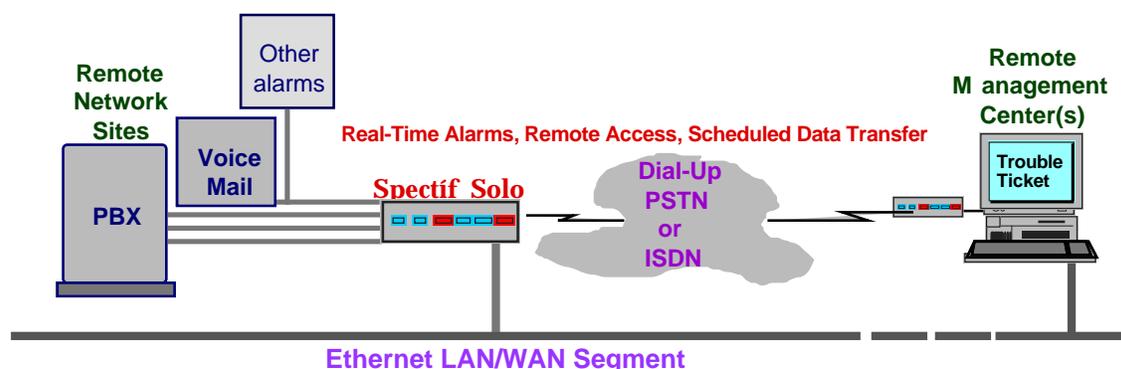


## The Power of One

Solo allows service providers to implement *unified* service delivery strategies that are cost effective and that satisy the variety of needs arising from management of costs, service, performance, change and security in heterogeneous network environments.

*One* open platform bridging the requirements of voice and data networks.

*One* powerful platform, supporting multiple data streams, multiple users, multiple sessions[1] and multiple communications media.

*One* versatile platform you can enhance through SIMM upgrades in the field, and software applications -- ensuring your business will keep step with changing technology and the changing requirements of your customers.
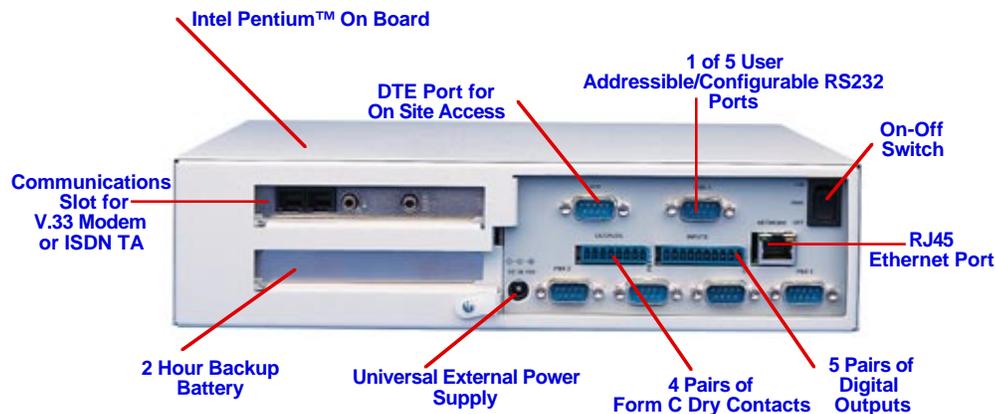
Spectíf Solo helps service providers reduce costs, improve service, and add value -- setting a new standard in remote network management.

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[1] One user per session, per port.

## Reduce Costs

Whether you operate in dial-up, ISDN or Ethernet LAN/WAN environments, you can count on Solo.  Proven AT alarm and traffic handling and classification features allow you to plan and control service delivery and remote maintenance.  You can implement a consistent strategy for all types of switches and network equipment, confident that Solo will forward the critical alarms in real time and capture any or all other data for scheduled analysis.  No need to purchase proprietary PBX management systems when Solo and Spectíf Events Manager (SEM) -- TSB's central management platform -- can handle all types of switches[2].  Downloadable alarm classification, handling options and switch support[3] software increase productivity, providing the framework to maximize senior technicians' skills.

Proven CC calling logging and  handling provide a consistent method of processing CDR/SMDR data.  Call records can be translated on site[4] and viewed remotely, allowing Solo to intelligently monitor calls and calling patterns for toll fraud activity[5].



Intel Pentium™ On Board
DTE Port for On Site Access
1 of 5 User Addressible/Configurable RS232 Ports
On-Off Switch
Communications Slot for V.33 Modem or ISDN TA
RJ45 Ethernet Port
2 Hour Backup Battery
Universal External Power Supply
4 Pairs of Form C Dry Contacts
5 Pairs of Digital Outputs

## Improve Service

With five addressable RS232 ports, Solo lets you develop innovative service strategies for your customers.  Each port can intelligently monitor and access a unique piece of network equipment.  You can assign each port to a unique destination, individual or service specialist, confident that Solo will guard overall site and network security while maintaining a complete activity log.  Solo can monitor traffic data and generate traffic alarms when switch support enabled, allowing you to detect bottlenecks and proactively manage network service levels.

## Add Value

In today's fiercely competitive environment, customers are looking for added value from their service providers.  Power, flexibility and remote intelligence make Solo the ideal platform to support value added strategies.  Use Solo to launch new service offerings such as call accounting, toll fraud detection and PBX database backup and recovery[6].  Use Solo to manage and maintain additional types of voice/data equipment for your customers.  Develop monthly service bulletins around Solo-monitored site activity logs.  Solo is more than a remote network management computer, it's a company dedicated to helping service providers achieve excellence for their customers.

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[2] Subject to switch support availability
[3] Subject to availability
[4] CC 'native' mode.  Records can also be collected raw.
[5] Optional software application.
[6] Optional software application

## Innovative Ideas from TSB International

TSB International's Spectíf remote access network management solutions help service providers to increase productivity, reduce costs, improve service and add value in multi-vendor network environments. Spectíf products are widely employed by service providers like British Telecom, Swisscom, Ameritech, AT&T Solutions, EDS, Stonehouse and GPT Siemens.

TSB's products and services are sold directly to end users in North America, the U.K. and Europe and are distributed worldwide through telephone companies, PBX manufacturers and value added resellers.

| HARDWARE SPECIFICATIONS | | SOFTWARE SPECIFICATIONS | |
|---|---|---|---|
| Storage Memory | 4 Meg upgradable to 124 Meg | VxWorks | Real-time embedded open operating system |
| Operating Memory | 4 Meg FLASH D.O.C | Alarm Handling[8] | AT function/feature set plus SNMP traps and SNMP conversion |
| Serial Ports | 5 user addressable +DTE | | |
| Backup Battery | 2 hours full operations with 4 Meg of storage | CDR Handling | CC function/feature set CC 'native' and raw ASCII/Binary modes |
| Communications | Ethernet RJ-45 (standard) V.33 modem card (or) ISDN TA card (or) ISDN + HDLC card | Diagnostics | AT and CC diagnostic alarm sets plus more |
| | | Supported Protocols | X-Modem, Telnet, TCP/IP, PPP, SNMP |
| Additional Input/Outputs[7] | 4 pairs Form C inputs 5 pairs digital outputs | Site Log | Pollable and viewable via remote access |
| Indicators | 8 LED status indicators | Security | Random password change with SEM. Dial-back by password phone number, by port |
| Processor | Intel Pentium | | |
| Clock | Real time, Y2K compliant | Multi-User | One user per port, per session |

For further information, please contact:

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[7]Not software-supported in initial release

[8] Subject to switch support availability