

General

The S24530A is a digital switching array specifically designed for routing RS-530 signals, but with greatly enhanced performance. Typical RS-530 data communications operate in the 1-2Mbps data rate while the S24530A is capable of data rates exceeding 50Mbps. The unit's core technology is LVDS providing excellent digital bandwidth and performance parameters.

Configurations can be specified from 3x3 to as large as 24x24. Expansion is simple by adding plug-in cards at the rear of the unit.

Built-in features include redundant hot-swap power supplies, integrated rack mounting plus a powerful command and status protocol (488.2 compliant). With a global installation base, they are considered the next generation of switching systems to meet today's and tomorrow's needs for high performance and cost effective digital switching.

Applications

The advanced and sophisticated features of the S24530A systems allows them to be used in numerous applications:

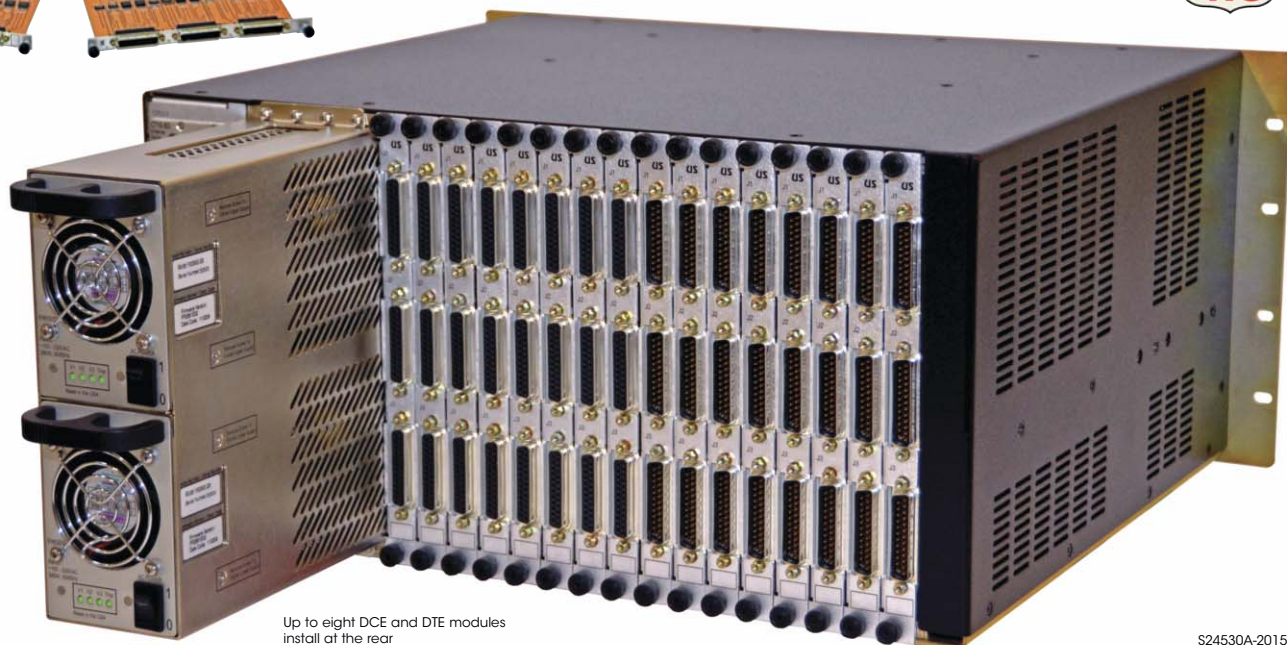
- Ground stations
- Uplink or downlink signal routing
- Computer room installations
- Communication centers
- Satellite installations

Features

- High reliability all digital and solid-state technology
- Input and/or output terminations optional
- Up to 50Mbps digital bandpass (min)
- DCE and DTE signal connectors (DB25)
- Full access matrix with 1:1 connections (or fan-out)
- Expandable configuration from 3x3 to 24x24
- Hot-swap module technology
- Menu driven color touchscreen display
- Available with either single or dual CPUs
- 10/100 Ethernet, USB and Serial control ports
- Includes TCP/IP, SNMP, IPv4 & IPv6
- Removable microSD card for secure environments
- Rugged 5RU high aluminum chassis (8.75")
- International AC power range
- Self-monitoring hot-swap plug-in supplies with PFC
- Integrated rack mount design (19 inch)
- Chassis slide mounting hardware (slides not included)
- Certified CE EN61010 (LVD)
- Compatible with RouteWarePRO control software



Advanced C3 Controller
Single or Dual



Up to eight DCE and DTE modules
install at the rear

S24530A-2015-03

System Details

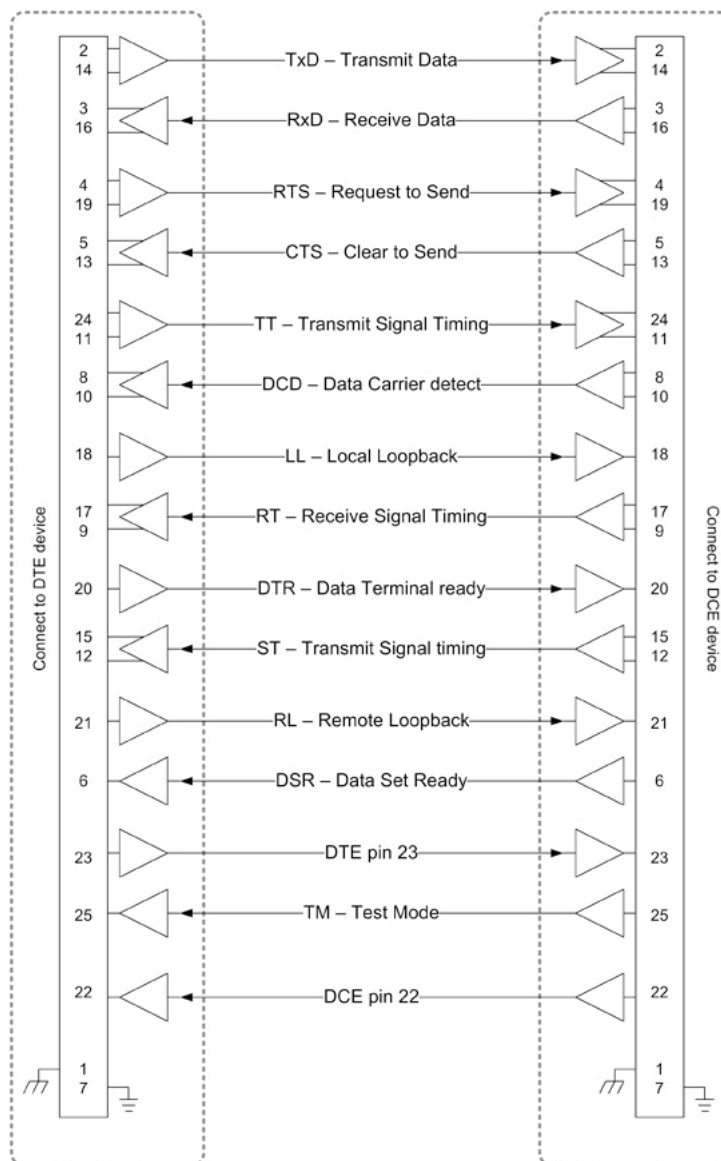
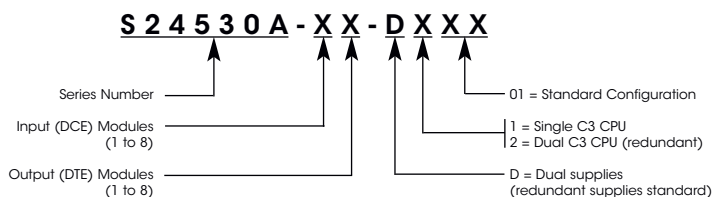
The System S24530A is a digital switch array specifically designed for routing RS-530 signals. Fully populated, this unique unit contains 24 DTE ports that can be connected to 24 DCE ports. All RS-530 signals are routed on the DB25 connectors. The unit is configurable from 3x3 to 24x24 in independent (DCE, DTE) increments of three ports.

The 5RU rack mountable unit can be populated with up to eight DCE modules and eight DTE modules, each containing 3-ports. These modules install at the rear of the unit with the ports rear facing.

The units are equipped with cool-running hot-swap redundant power supplies and user friendly front panel display and controls. For remote operation, one or two (redundant) plug-in LXI certified 10/100 Ethernet modules are installed to remotely monitor system health, and to control the unit. Serial and GPIB control is optional.

System control options and switching configurations are stored in non-volatile memory. Up to 199 different switching configurations may be stored in memory and may be recalled with a single command. This greatly simplifies control of commonly used configurations. For power up conditions, the system can be set to recall the last configuration since power down, or to completely clear all crosspoint connections.

Model Number Assignment



Performance Specifications

Switching configurations.....3x3 to 24x24 (see above)
Configuration typeScaledbe
Switching technology.....LVDS core
Type of arrayMxN blocking (1:1 connections)
Signal typeEnhanced RS-530
Signal connectors.....DB25P and DB25S
Data rate supported.....DC - 50Mbps
Signal coupling.....DC coupled
Power to "ready"<5 seconds (no connections)
Command to action<20mS

General Specifications

Remote control1 or 2 C3 CPU (10/100, USB & Serial)
Local controlColor touchscreen
Configuration memory20 locations (min)
Unit firmwareField upgradable
Control GUI.....Optional (RouteWarePRO)
Software drivers.....LabVIEW VISA (download)
AC power switch.....Rear of unit (2ea)
AC power90-264VAC, 47 to 440Hz, <250W
Power cordNEMA 15A (USA) 6 foot (2ea)

Power section.....Hot-swap redundant supplies
Power supply monitoring.....Included
High temperature alarmIncluded
Front panel colorFED-STD-595B #26440 (light gray)
Front panel thickness1/8"
Mounting.....Chassis-Trak® mounting pattern
CoolingForced cooling with RPM monitoring
VentingSide-To-Side
Weight50lbs
Size8.72"H x 19.00"W x 22.00"D
Operating temp.....0 to +55C
Non-operating temp.....-20 to +75C
Humidity.....0 to 95% (non-condensing @ +25C)
Altitude<10,000 feet ASL
Mounting.....RETMA slots (EIA), 5RU high
Chassis finish.....Black texture enamel & gold iridite
HandlesBlack anodized
MTBF.....>35,000 hours per MIL-STD-217E, N1
CertificationsCE EN61010 LVD

Universal Switching's policy is one of continuous development, and consequently the company reserves the right to vary from the descriptions and specifications shown in this publication.