Universal Switching Corporation

Specification Sheet S24530

RS-530 Digital Matrix

System S24530

Scaleable from 3x3 to 24x24

September 2013

General

The S24530 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 S24530 is cabable of data rates exceeding 50Mbps. The unit's core technology is LVDS providing excellent digital bandwidth and includes many advanced features.

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 S24530 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 (D-Sub)
- Full access matrix with 1:1 connections
- Expandable configuration from 3x3 to 24x24
- Front panel LED back-lit keypad controls
- High contrast vacuum-fluorescent display
- Various remote interface choices included
- Includes Ethernet with TCP/IP
- Command set is 488.2 compliant
- Rugged 5RU high aluminum chassis (8.75")
- International AC power range
- Self-monitoring hot-swap plug-in power supplies
- Rack mount design (19 inch)
- Built-in chassis slide mounting (slides not included)
- Certified CE EN61010 (LVD)

Up to eight DCE and DTE modules install at the rear.

S24530-201309

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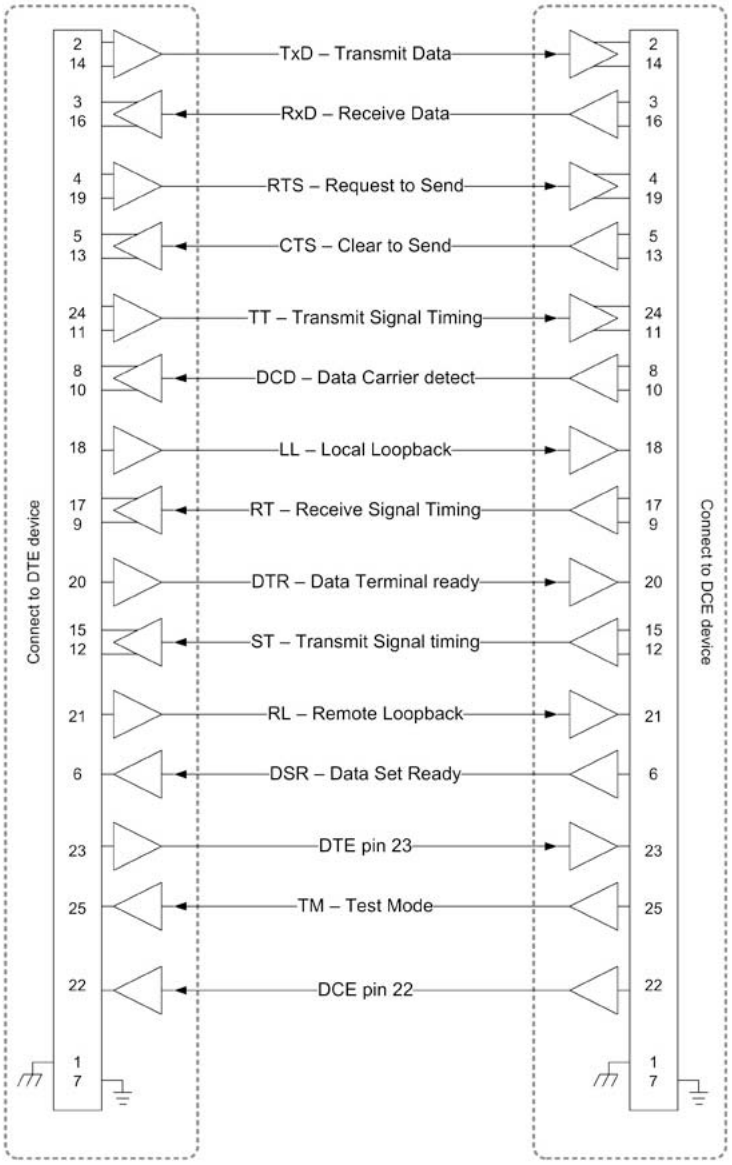
System Details

The System S24530 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.

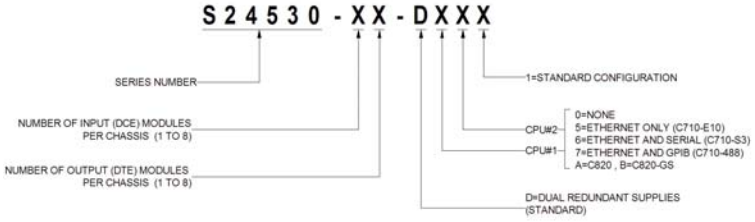
The 5RU rack mountable unit can be populated with up to eight DCE modules and eight DTE modules, each containing 3-ports. These modules install at the rear of the unit with the ports rear facing.

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 type.....Scalealbe
Switching technology.....LVDS
Type of array .....MxN blocking (1:1 connections)
Signal type .....Enhanced RS-530
Signal connectors.....DB25P and DB25S
Data rate suported .....DC - 50Mbps
Signal coupling.....DC coupled
Power to "ready".....<5 seconds (no connections)
Command to action .....<20mS (with Ethernet)

General Specifications

Remote control ports.....Ethernet (10/100BaseT) with TCP/IP
Local control .....24 position LED illuminated keypad
Configuration memory .....199 locations
Unit firmware.....Field upgradable
Control GUI.....Optional (RouteWarePRO)
Software drivers .....LabVIEW VISA (download)
Display .....4x20 vacuum fluorescent
AC power switch .....Rear of unit (2ea)
AC power.....90-264VAC, 47 to 440Hz, <250W
Power cord .....NEMA 15A (USA) 6 foot (2ea)
Power section .....Hot-swap redundant supplies
Power supply monitoring.....Included
High temperature alarm.....Included
Front panel color .....FED-STD-595B #26440 (light gray)
Front panel thickness.....1/8"
Mounting .....Chassis-Trak® mounting pattern
Cooling .....Forced cooling with RPM monitoring
Venting .....Side-To-Side
Weight.....50lbs
Size .....8.72"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
Handles .....Black anodized
MTBF.....>35,000 hours per MIL-STD-217E, N1
Certifications .....CE EN61010 LVD

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