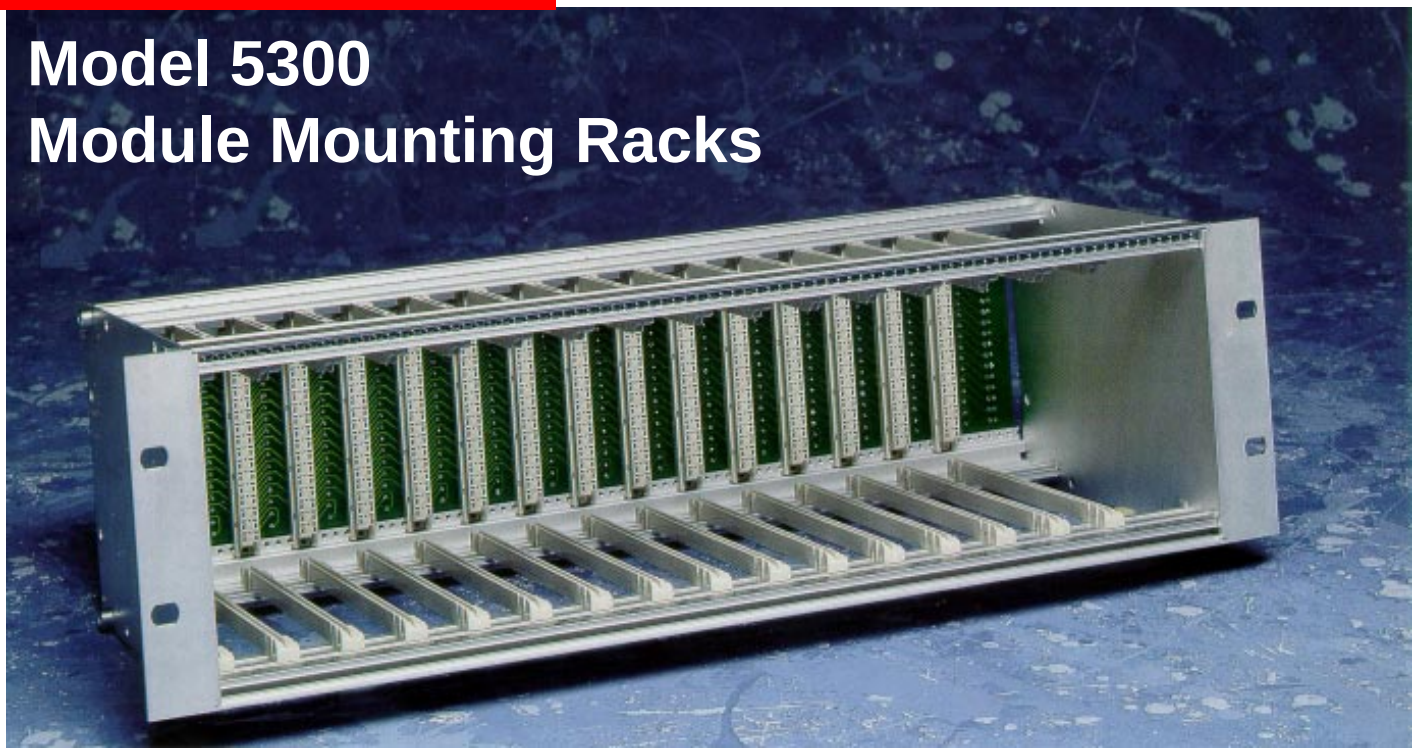
Model 5300
Module Mounting Racks



- ***4, 8 or 16 Module mounting spaces for any mix of NOVA-5000 System Modules***
- ***Manufactured to EIA specifIcations for use in industry standard 19 inch wide cabinets. Utilizes 5¼ inches (3U) of vertical mounting space.***
- ***Also conforms to Eurocard and DIN standard designs***
- ***Printed Circuit Backplane with gold plated contact connectors for each module***
- ***16 Screw terminal connections for each module position for field wires and system logic connections***
- ***System Busses common to all modules for power, alarms, resets, etc.***
- ***Module spaces keyed to prevent insertion of incorrect module***
- ***Screwdriver required to remove modules from rack***

Listed Fire Protective Signaling System, Releasing Device, Process Management Equipment

Fire, Intruder and Social Alarm System

SAFETY SYSTEMS TECHNOLOGY

The SST Model 5300 Module Mounting Rack provides mounting space for up to 16 standard NOVA-5000 System Modules. It occupies 5¼ inches of vertical mounting space in an EIA standard 19 inch wide cabinet. The rack has 4, 8 or 16 sets of "card guides" into which the printed circuit card that is part of each NOVA-5000 module slides. A printed circuit "backplane" on the rear of the rack is equipped with connectors which mate with the connectors on the rear of each module. Each connector has 32 gold-plated contacts, divided into two groups of 16 contacts. One group of 16 contacts connects to individual screw terminal blocks for each module position, and carries signals which are unique to the particular module installed, such as sensor connections, alarm relay contacts, etc. The second group of 16 contacts is connected by busses across the backplane to all of the modules. The busses carry signals that are common to all modules, such as power supply, system alarm, fault alarm, etc. An additional screw terminal block is provided for making external connections to these busses. The function of the common busses is explained more specifically in the table on this datasheet.

Each module position in the rack is equipped with a settable keying system which allows only one type of NOVA-5000 Module to be inserted into that position. A screw on the face of each module retains it in the rack. Any number of Model 5300 racks may be interconnected together to form large NOVA-5000 Systems.

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

All Detection and Control System Modules shall be installed into standard module mounting racks. Each module mounting rack shall provide *(4, 8 or 16)* mounting spaces for standard system modules, and shall occupy 5¼ inches of vertical mounting space. The rack shall include a printed circuit backplane on the rear of the rack equipped with *(4, 8 or 16)* connectors for the modules. Connector contacts shall be gold plated to provide suitability for low level signals in corrosive environments. A 16-position screw terminal block shall be provided for each of the *(4, 8 or 16)* module positions. The terminals shall be suitable for termination of wire sizes up to 18 AWG or 1 mm^2 without use of lugs, ferrules or terminals. Connection to any common busses provided on the backplane shall also be through screw terminal blocks. Each module position in the rack shall be equipped with a settable keying system which allows only one type of module to be inserted into that position. Tapped holes shall he provided on the front of the rack for securing the plug-in modules in place. Safety Systems Technology Model 5300 Module Mounting Racks, or approved equivalent, shall be supplied.

COMMON BUS SIGNALS ON BACKPLANE

INPUTS TO MODULES

Power Supply A	Main 24 VDC operating power
Power Supply B	Redundant 24 VDC power
Acknowledge bus	Normally open switch connected to this bus will cause any flashing alarm or fault LED's on modules to change to steady on
Reset bus	Normally open switch connected to this bus will reset any latched alarms to the normal state
Lamp Test bus	Normally open switch connected to this bus will cause LED's on all modules to be turned on

OUTPUTS FROM MODULES

Isolate Loop	Normally closed circuit. Opens when isolate switch is operated on any module.
Fault Loop	Normally closed circuit. Opens when fault occurs on any module.
Alarm Pulse bus	Each Module transmits a single pulse on this bus when it first detects an alarm condition. Pulse ansmitted on each subsequent alarm. Used to drive a latching alarm circuit.
Isolate Pulse bus	Modules equipped with isolate switches transmit a single pulse on this bus when switch is activated. Used to drive latching alarm circuit.
Fault Pulse bus	Each Module transmits a single pulse on this bus when it first detects a fault condition. Pulse retransmitted on each subsequent fault. Used to drive a latching fault circuit.

TECHNICAL SPECIFICATIONS

Module Mounting:	Space for 4, 8 or 16 NOVA-5000 Modules Each module is 0.99 inches wide.
Module Connections:	32 pin connector for each module. Gold plated contacts. Connector contacts are rated to carry up to 6 amps each.
Module Keying:	Keying device at each module position can be set to any one of 66 possible key combinations. The NOVA-5000 modules will plug into a slot only when the keying on the module and slot have been set to the same combination. Combinations can be changed whenever necessary.
Wiring Connections:	Screw terminal blocks, accommodate wire sizes up to 18 AWG or 1.0 mm^2 One terminal block for each of the modules, plus one terminal block for connection to common busses on backplane.
Power Requirement:	24 VDC, Dual (redundant) Power Supplies All power is distributed to modules plugged into rack. No power is required for the rack itself.
Overall Size:	6.20, 10.59 or 19.00 inches wide, 5.22 inches high, 7.50 inches deep 157.5, 269 or 482.6 mm wide, 132.6 mm high 190.5 mm deep Occupies 3 height units (5¼ inches) in standard 19 inch rack.
Material:	Die cast and extruded aluminum frame. Printed circuit backplane constructed of UL-approved flame resistant fiberglass-filled epoxy. Ruggedized construction allows mounting rack fully loaded with NOVA-5000 modules to withstand shipping while mounted in place in enclosure.
Weight:	5 pounds (2.27 kg)

ORDERING INFORMATION

PART NO.	DESCRIPTION
35300-16	Model 5300 Module Mounting Rack 16 plug-in spaces, l9 inch rack mounting
35300-08	Model 5300 Module Mounting Rack 8 plug-in spaces, 10.59 inch mounting width
35300-04	Model 5300 Module Mounting Rack 4 plug-in spaces, 6.59 inch mounting width
35340	Blank Plug-In Module One required for each unused space in Module Mounting Rack

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