



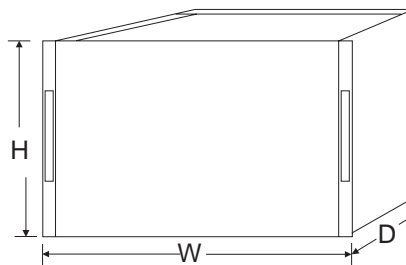
Matrix 66 Super-High-Density Video Switching System

- Replaces four high-density card cages
- 256 camera inputs/16 monitor outputs OR
- 128 camera inputs/32 monitor outputs
- Includes motherboard and power supply

Matrix 66 is a microprocessor-based video switching system that automatically routes video signals from a requested camera position to a specified monitor. The Matrix 66A V6680SCC-16-1A super-high-density card cage can accommodate 4 video switcher cards, and each switcher accepts up to 64 video inputs, for a card cage capacity of 256 inputs and 16 outputs. Alternatively, the V6680SCC-32-1A card cage can be configured for 128 camera inputs and 32 monitor outputs. This greatly reduces the amount of space required for equipment installation.

The non-redundant power cages are supplied with a motherboard and a power supply. The 128 x 32 configuration requires an additional video amplifier board. Both card cages contain slots for up to 4 video switcher cards, each of which accepts 64 video inputs, and an expander card. Refer to Table 1.

One of three control systems must be used with the Matrix 66: the NOVA V1500 control system, NOVA V1300 control system or the NOVA V1466A control system. The V1300 or V1500 must be used if the system size is to exceed 256 cameras, 32 monitors (more than two card cages). The V1300 or V1500 is an external control system that may include the Matrix 66 as one of its CCTV components. If a V1300 or V1500 control system is used to control the Matrix 66, a decoder board is required to be inserted in the slot where the CPU is normally located. The V1466ASCPU-A is an internal printed circuit card that is installed into the Matrix 66 card cage. External components, such as keypads, receivers and alarm devices are always connected directly to the control system. The specific combination of these cards in a given card cage and the number of card cages required for a system are determined by the size and configuration of the video system it is supporting. The maximum numbers of cameras and monitors are determined by the capacity of the CPU controlling system.



Vicon Product Facts	FC CE	Model No: Refer to Table 1	Product Code: Refer to Table 1	SEC: 2	SPEC: 824	REV: 1205	1
---------------------	-------	----------------------------	--------------------------------	--------	-----------	-----------	---

Model	Product Code	Description
V6680SCC-16-1A V6680SCC-16-1AP	6020-20 6020-40	Matrix 66A switcher card cage. Includes power supply and motherboard. Accommodates up to 4 switcher cards and two output amplifier cards or one amplifier card and one expander card. Available in two input voltages, 120 VAC (6020-20) and 230 VAC (6020-40). Configured as 256 video inputs x 16 outputs. Use with non-redundant CPU systems such as the V1300, V1400 and V1500 Series.
V6680SCC-32-1A V6680SCC-32-1AP	6020-30 6020-60	Matrix 66A switcher card cage. Includes power supply and motherboard. Accommodates up to 4 switcher cards and two output amplifier cards or one amplifier card and one expander card. Available in two input voltages, 120 VAC (6020-30) and 230 VAC (6020-60). Configured as 128 video inputs x 32 outputs. Use with non-redundant CPU systems such as the V1300, V1400 and V1500 Series.
V6610S-1A	6023-10	Video switcher card. Accommodates 64 inputs.
V6610RP64-1A	4628-10	64-channel camera input panel.
V6610RP32-1A	4628-20	32-channel camera input panel.
V6610RP16-OA	4628-30	16-channel monitor output panel.
V6610RP32-OA	4628-40	32-channel monitor output panel
V6610RP64-LA	4629-10	64-channel camera looping panel.
V6640SEXP32-A	4470-10	32-channel expander card; for use in star configuration.
V6640SEXP16-A	4470-20	16-channel expander card; for use in serial loop configuration.
V6632-AMP-1A	6024-10	Video amplifier board with outputs for monitors 1-16.
V6670XS-A	4769-10	Card extender for switcher slots (for service)
V6670XA-A	4769-20	Card extender for AMP/OSD slots (for service)
V66RCB-24	4473	24-inch coaxial ribbon cable for looping video inputs from a switcher card to external devices. D-shell connector on one end, 8 BNC connectors on the other end.
V66RC-36	4472	36-inch coaxial ribbon cable for looping video inputs from one card cage to another. D-shell connector on each end.
V6650RCP-A	4471-10	Rear closure panel for unused card positions.
V75TR-SHD	4479	75-ohm terminator for D-shell outputs.
V75T	3260	75-ohm terminator for BNC outputs.

Table 1: Models, Product Codes and Descriptions

Technical Information

ELECTRICAL

Maximum Camera/Monitor Configuration (One Card Cage):	256 inputs x 16 outputs or 128 inputs x 32 outputs.
Input Voltage:	6020-20/30: 120 V, 60 Hz. 6020-40/60: 230 V, 50 Hz.
Current:	0.47 A nominal.
Power Consumption:	56 W (fully loaded card cage).
Heat Equivalent:	3.2 btu/min (0.8 kg-cal/min) nominal. Note: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of the heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.
Line Cord:	3-wire grounded detachable IEC-320 standard power cord.
Fuse:	In power cord receptacle block: 120 V: 1 A, 20 mm. 230 V: 0.5 A, 20 mm. On power board: 3 fuses, 3.5 A (2) or 5 A (1), 2 AG slo-blo.
Input Signal:	2.0 V p-p maximum.
Input Impedance:	Looping: greater than 50 kohm. Terminating: 75 ohm.
Outputs:	75 ohm source terminated: 1 V peak-to-peak nominal into a 75-ohm load.
Video Frequency Flatness*:	100 kHz to 10 MHz \pm 0.6 dB.
Bandwidth*:	Typical 1 Hz to 20 MHz @-3 dB.
Crosstalk Isolation:	Typical 50 dB at 3.58 MHz.
Input to Input Isolation:	Typical 55 dB.
Gain:	Unity.
Differential Gain/Phase:	Less than 1%/1°, with 10-90% picture level.
Hum and Noise:	70 dB below 1 V peak-to-peak from 50 Hz to 5 MHz.
Signal-to-Noise Ratio:	Greater than 70 dBrms typical unweighted, 15 kHz to 5 MHz.
Video Switcher Frame Control Logic Input:	5 V TTL/CMOS level, twelve data bits per camera input and eight data bits per monitor output.

*Single crosspoint condition between 1 camera to 1 monitor connection.

Video Switcher Connectors:

Video: 256 or 128 camera BNC inputs, 16 or 32 monitor BNC outputs.
Looping video output: 15-pin D-shell connectors.
Input from control: one 25-pin D-shell connector.
Control output: one 25-pin D-shell connector.
Printed circuit boards: motherboard connectors.

Video Switcher Printed Circuit Boards:

All card cages include a power supply module and a motherboard. The remaining card slots may be fitted with various board options. The dual redundant card cage contains two power supplies in a hot standby configuration.

Radio Frequency Emission Rating:

FCC Class A.

MECHANICAL

Construction:

Steel chassis with aluminum front panel.

Finish:

Chassis: zinc plated clear chromate.
Front panel: black baked enamel.

Dimensions:

See Figure.
Height (H): 14.0 in. (356 mm).
Width (W): 19.0 in. (483 mm).
Depth (D): 12.7 in. (322 mm).

Weight, Card Cage:

29.5 lb (13.4 kg). (Empty card cage including front panel only. Switcher cards and rear panel BNCs not included.)

Weight, Cards:

1.0 lb (0.45 kg).

Shipping Dimensions:

Height: 18.5 in. (470 mm).
Width: 22.5 in. (582 mm).
Depth: 17.5 in. (445 mm).

Shipping Weight:

40.5 lb (18.4 kg).

Shipping Volume:

4.20 ft³ (0.120 m³).

ENVIRONMENTAL

Operating

Temperature Range:

32 to 122° F (0 to 50° C).

Operating

Humidity Range:

Up to 95% relative, noncondensing.

Storage

Temperature Range:

-40 to 150° F (-40 to 65° C) maximum.

Storage

Humidity Range:

Up to 95% relative, noncondensing



89 Arkay Drive
Hauppauge, NY 11788
www.vicon-cctv.com

TEL: 631-952-2288
FAX: 631-951-2288
TOLL FREE: 800-645-9116