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# MatrixPRO-II 3G/HD/SD-SDI series

High-speed 3G serial digital routers



Barco's MatrixPRO-II SD/HD/3G-SDI series offers three models of high-speed serial routers: 8x8, 16x16 and 32x32. All three models are compact, have an extremely slim profile, are cost-effective, and provide an excellent solution for applications where budget and space are at premium.

## Featuring genlock input

All routers support SDI formats from SD formats to 3G/HD. Their superior design allows for image switching and signal distribution without artifacts. They all feature a genlock input with loop through, ensuring that all switching is synchronized with the house sync.

## Flexible control

The routers can be controlled from the front panel, RS-232, Ethernet connections or the Encore and ScreenPRO-II presentation systems. Barco's MatrixPRO-II SDI router series allows a single unit to be subdivided into multiple layers.

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## Product specifications

## MatrixPRO-II 3G/HD/SD-SDI series

<b>Supported signal formats</b>	DVB-ASI, SMPTE 259M, SMPTE 292M, SMPTE 424M; 270M bps – 2.97Gbps; 2K, 2048x1556/23.98 and 24
<b>Inputs</b>	<ul style="list-style-type: none"><li>Standard: SMPTE 259M / SMPTE 292M / SMPTE 424M</li><li>Data rate: 270Mbps – 1.485Gbps / 2.97Gbps</li><li>Connector: 75 ohm BNC female</li><li>Impedance: 75 ohm nominal</li><li>Return loss: &gt; 15dB (5MHz-1.485GHz); &gt; 10dB (1.5GHz – 3GHz)</li><li>Cable equalization:<ul style="list-style-type: none"><li>Automatic up to 70m @ 2.97Gbps, typical Belden 1694A</li><li>Automatic up to 100m @ 1.485Gbps, typical Belden 1694A</li><li>Automatic up to 300m @ 270Mbps, typical Belden 8281</li></ul></li></ul>
<b>Outputs</b>	<ul style="list-style-type: none"><li>Connector: 75 ohm BNC female</li><li>Impedance: 75 ohm nominal</li><li>Return loss: &gt; 15dB (5MHz-1.485GHz); &gt; 10dB (1.5GHz – 3GHz)</li><li>Signal level: 800mVp-p ±10%</li><li>Rise/fall time:<ul style="list-style-type: none"><li>- 20% - 80%</li><li>- SD limit: 0.4ns – 1.5ns, &lt; 0.5ns rise/fall variation;</li><li>- HD limit: &lt; 270ps, &lt; 100ps rise/fall variation;</li><li>- 3G-HD limit: &lt; 135ps, &lt; 50ps rise/fall variation</li></ul></li><li>Amplitude overshoot: &lt; 10%</li><li>Signal polarity: Non-inverting electrical with respect to inputs</li></ul>
<b>Signal Speed</b>	<ul style="list-style-type: none"><li>Timing jitter: SD: &lt; 0.2 UI; 3G-HD/HD: &lt;1UI</li><li>Alignment jitter: SD: &lt;0.2UI; 3G-HD/HD: &lt;0.2UI</li></ul>
<b>Safety Regulations</b>	Compliant with CE EN55103-1 and 2
<b>Control</b>	Serial port: RS-232, DB9 connector female Ethernet port: 10/100BaseT Ethernet bus, 1x RJ45 connector
<b>Dimensions (HxWxD)</b>	<ul style="list-style-type: none"><li>R9004661 (8x8) - R9004660 (16x16): 44 x 483 x 50 mm / 1.73" x 19" x 1.97"</li><li>R9004662 (32x32): 88 x 483 x 50 mm / 3.46" x 19" x 1.97"</li></ul>
<b>Weight</b>	<ul style="list-style-type: none"><li>R9004661 (8x8): 1.3 kg / 2.86 lbs</li><li>R9004660 (16x16): 1.4kg / 3.08 lbs</li><li>R9004662 (32x32): 2.2 kg / 4.84 lbs</li></ul>
<b>Power consumption</b>	<ul style="list-style-type: none"><li>R9004661 (8x8): current: @ +15V/-15V: 900/2 mA - power: 14W</li><li>R9004661 (16x16): current: @ +15V/-15V: 1,273/4 mA - power: 19W</li><li>R9004662 (32x32): current: @ +15V/-15V: 1,302/1,035 mA - power: 35W</li></ul>
<b>Power supply (R9871081)</b>	<ul style="list-style-type: none"><li>AC supply: 100-240 VAC, 50-60 Hz / Max. 1.6A</li><li>AC main connector: IEC 320</li><li>DC output: current: +15V, max 2.2A / -15V, max 1.35A / Power: maximum 43W</li><li>DC connector: DB9, female</li><li>Weight: 0.35 kg / 0.77 lbs</li><li>Safety standards: compliant with CE EN60950, UL-1950/CSA22.2</li></ul>

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