

The Cygnus router range offers the highest density routing available using industry standard BNC connections - essential for the low loss long cable runs associated with routers of this size. Full redundancy for power and control make it an ideal choice for the most 'mission critical' applications.

Complimenting the Sirius 630 and Sirius 800 routers, which offer multi format operation in one frame, Cygnus offers compact low cost routing for video applications, with enhanced control and monitoring facilities.

The Cygnus family consists of two different frame configurations:

576 x 576 in 26U
(24U + 2U PSU frame).

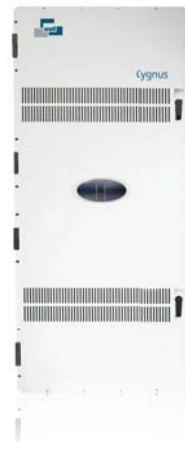
288 x 576 in 21U
(19U + 2U PSU frame).

Different formats are configurable in any combination of 12 channel input and 24 channel output blocks, up to 576 x 576 in 1 frame, with further expansion available by combining frames. You can add input or output modules at any time, allowing you to grow your system easily, and affordably.

Monitoring outputs allow monitoring of both router inputs and outputs.

Cygnus

3G Native HD Routing



Features

- Specifically designed for 1.5Gbit/s HD and 3Gbit/s 1080p
- 3GB/s capable cards route 3G, 1.5G HD-SDI and SDI
- 576 x 576 in 26U (including redundant PSUs)
- 288 x 576 in 21U
- Dual redundant PSUs
- Dual redundant controllers
- Control using Nebula or new Nucleus MCM based controller
- Dual Ethernet (one per controller)
- 4 x RS485 ports, configurable as remote or panel ports
- Monitoring and alarms of PSUs, fans, controllers, all signal cards
- Four video references (all black & burst or HD tri-level) - allows clean multi standard switching
- Timecode input for pre-loaded timed switching
- Monitoring outputs - for input and output monitoring
- Exceptionally low power consumption

In addition to its integration with the MCM system (providing a wide range of enhanced control of routing, master control, modular and automation products) Cygnus is fully compatible with the Snell Aurora control system, and has an internal controller providing the ability to add local control panels and UMDs direct from the router. Control is further enhanced with the options of Snell General Switcher protocol via RS485 or Ethernet, OEM protocols, or SNMP. Designed for the whole spectrum of routing applications, the Cygnus router is available with redundant on-board controllers and power supplies guaranteeing 24 by 7 operation.

Design Features

Cygnus, like all Snell's hardware products, has robustness and ease of maintenance built-in...as is essential for any critical signal application. All modules are 'hot-pluggable', with surge suppression circuitry and phased power-up allowing quick and safe module swapping.

The dual redundant power supply units supply only 48 volts, all modules convert this to the required levels locally, which not only makes the power routing simple, but provides thorough power rail isolation between modules. The robust approach to redundancy is further aided by the retention of crosspoint and configuration data in non-volatile control card memory.



Ordering Information

Please contact Snell sales or your local Snell agent for order codes.

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A separate PSU chassis allows the PSUs to be installed remotely from the router frame, giving flexibility in rack layout.

If dual control cards are fitted, crosspoint, configuration and database information is synchronized between the two cards. Changeover is automatic in the event of failure, and the tri state buffering of all control signals ensures that changeover is also transparent to both the internal and any external systems.

All modules are addressed by their position, rather than by jumper settings and the careful consideration of power routing and driver voltage levels ensures that mis-plugged modules are not damaged.

Signal routing was designed from the outset for 3Gbit/s, with a single card design capable of SD, HD and 3G. Inside the frame, signals are routed point to point, using discrete buffering, thereby maintaining signal integrity and quality. This approach allows the router to be part equipped or "partitioned" with no loss of functionality.

Control

- Control using Nebula control or the new Nucleus (MCM based) controller
- Dual Ethernet (one per controller)
- 4 x RS485 ports, configurable as remote or panel ports *
- Control using:
 - Snell General Switcher Protocol (SW-P-02)
 - Snell General Remote Protocol (SW-P-08)
 - SNMP
 - Snell DCCP Protocol on Ethernet *
 - OEM protocols (contact Snell for details)
- Monitoring and alarms of PSUs, fans, controllers, all signal cards
- Input signal failure detection *
- Four video references (all Black & Burst pr HD Tri-level) - allows clean multi standard switching *
- Timecode input for pre-loaded timed switching *
- Monitoring outputs - 4 for input and output monitoring

* with Nucleus control

Technical Specification

General	
Power supplies	Autosensing 90 to 230Vac nominal 50/60Hz
Power consumption	1600W max @ 576 x 576
Weight	120Kg max
Monitoring	PSU monitor Failure alarm relay and reported on DCCP and SNMP fan monitor failure alarm relay and reported on DCCP
Control	4 x RS485, panel/remote control 2 x Ethernet 4 x video reference (mixed sync or HD tri-level sync)
Connectors	576 x 576 - 26U high 19 inch rack mounting x 490mm (19 inch) deep
Mechanical	288 x 576 - 21U high 19 inch rack mounting x 490mm (19 inch) deep
Environmental	Cooling Fan assisted front to rear
HD-SDI/SD-SDI/ASI	
Video Inputs & Outputs	Input equalization SD SMPTE 259m HD SMPTE 292m ASI SD inputs >250m (Belden 8281) HD inputs >140m (Belden 1694) for HD and SD signals
Input Equalization	3Gbps 1080p >70m Belden 1694A HD-SDI SMPTE292M >100m Belden 1694A SD-SDI SMPTE259M >180m Belden8281
Outputs	Reclocking, auto rate detecting for SD & HD + 3Gbps
Amplitude	800mV nominal