

## CNSIQ800 Gigabit Smart Ethernet Switch

### Features



- ◆ Network millisecond recovery time
- ◆ 2 Gbps throughput
- ◆ Redundant network
- ◆ True Plug and Go Operation
- ◆ Optional Plug and Go Multicasting
- ◆ Optional Power over Ethernet (PoE)
- ◆ Superior Return on Investment (RoI)

### Description

The CNSIQ800 Smart Switch is designed for *low-cost, high reliability* and *low port density* fiber deployments positioning it as the ideal platform for a broad range of IT applications addressing the requirements for a variety of vertical markets.

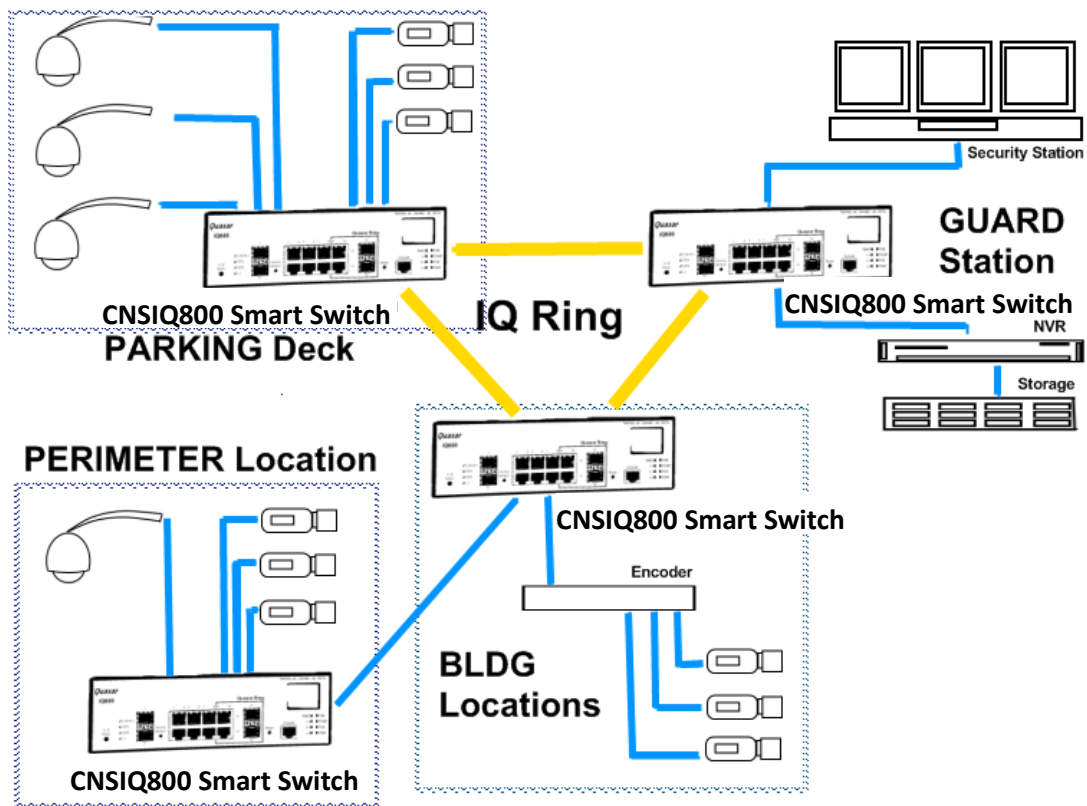
IQ Smart Switches are more powerful than other Ethernet Switches:

- ◆ Ultra-reliable Self-Healing backbone eliminating network overlay links
- ◆ Exceptional PoE delivery with a full 15.4W on every port
- ◆ Breakthrough Plug"n"Go Multicasting Technology

The CNSIQ800 Smart Switch with GigE SFP IQ Ring and 8 Ethernet Access Ports has several unique features that make this platform ideal for most IT networks

### Redundant Self-Healing GigE IQ Ring™

Redundant Self-Healing GigE IQ Ring™\_Quasar Technologies fault tolerant, self-recovering IQ Ring network virtually eliminates down time. It is a single fibre, full duplex solution for easy, cost effective transport. Fibre ports are compatible with both single mode and multi-mode fibres cables. A single IQ Ring can support hundreds of attached devices.



**IQ Ring Example applied to a Security Network: All IP based devices plug into the Gigabit Ethernet IQ Ring. IP devices can be managed locally and remotely over IP networks.**

## Plug-n-Go Installation

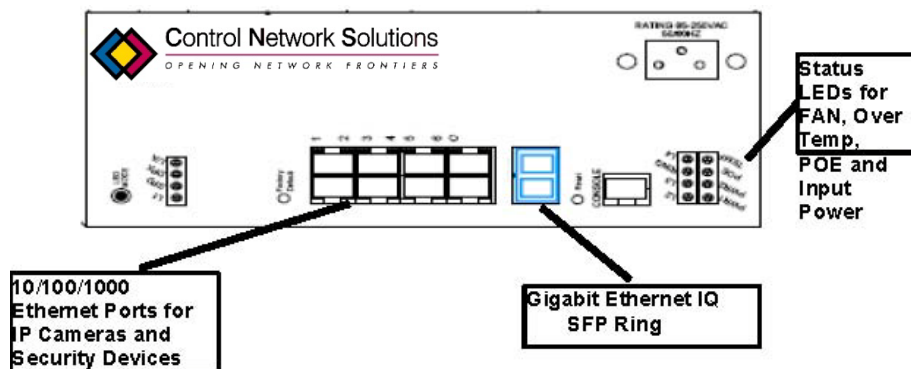
Plug"n"Go Installation\_CNSIQ800 Smart Switches are extremely easy to set up:

1. Plug-in the RJ-45 backbone cable, Ethernet RJ-45 Cat5e/Cat6 cables
2. Power on the CNSIQ800
3. The CNSIQ800 auto provisions all networking configurations
4. The entire ring and all devices are up and running.

## Lowest Total Cost Gigabit Solution

The innovative CNSIQ800 Smart Switch provides savings in many areas – faster installation, no administration, self-healing resilient ring architecture means low maintenance, easy network expansion, and flexible scalability.

## CNSIQ800 Interfaces



## Scalability

CNSIQ800 Smart Switch provides unlimited scalability in a redundant ring network as opposed to traditional Ethernet network switches. The CNSIQ800 utilises unique firmware and self-management techniques to overcome the limitations placed on Managed Ethernet networks. As many nodes as required can be added to an IQ Ring without the difficulties of reconfiguring the network experienced with Managed Ethernet switches. The data from IP-based devices is routed around the IQ Ring with extremely low latency to the Gigabit Ethernet port attached to the IP-based devices requesting the data such as servers, monitors, and/or recorders.

## Optional PoE and Plug-n-Go Multicasting

The CNSIQ800 Smart Switch also has the option to provide a full 15.4W on each and every access port without any power loss given PoE demand by every port.

**Note:** *Additionally, Quasar Technologies patent pending Plug"n"Go Multicasting is available as an option. In this mode, no planning, setup or configuration is required to implement a multicast environment on our network. Simply plug in your IP-based devices, Quasar Smart Switches take care of the rest. Devices that require the multicasting traffic, such as terminals or NVRs, will need to connect at a Gigabit rate.*

For more information on implementing Self-managed IP- based Ethernet networks please refer to the associated discussion document on our web site, details at the end of this data sheet.

## Multi-Vendor Compatibility

The CNSIQ800 is compatible with all IP-based Ethernet Switches and Routers. When connected to other vendors' equipment in a typical Star/Tree topology, the CNSIQ800 looks like any other standard switch and is interoperable with Spanning Tree Protocol. The Intelligent Quasar technology does not effect the operation of the non-IQ elements as the other network elements do not utilise the IQ Ring functionality. It is possible that customers will have an IQ Ring network of IQ Switches that attaches to a non-self-healing, non-self-managing IP based network. The Intelligent Quasar technology enhances the network reliability for mission critical applications.

## Specifications

<b>Electrical Specifications (<i>all values at ambient temperature</i>)</b>	
Operating Temperature	-40 to 80 C
Input Voltage	90 -240 VAC Universal
Power Consumption	100 Watts nominal, 275 Watts max with POE enabled
<b>Environmental Specifications</b>	
Humidity	95% non-condensing
<b>Ethernet Specifications</b>	
IQ Ring	Gigabit, Single mode 15km -60km
Ethernet Connections	8 ports RJ-45 Cat5e/Cat6 10/100/1000Mbps Autosensing
Optional Power Over Ethernet on 8 Service Ports	15.4 Watts max per port. Dual zone power
<b>Mechanical Specifications</b>	
Dimensions	12.0W x 5.0H x 8.0D inches (30.5 x 12.75 x 20.75 cm)
Weight	4.0 pounds (1.82Kgs)
Mounting Options	Standalone, DIN, or 19" rack mountable
<b>Standards</b>	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x. IEE802.af
<b>Certifications</b>	UL, CE, FCC Part 15

## Ordering Information

Part No	Description
	IQ800- Smart Switch (Copper backbone only) - 2 x 1Gb backbone Ports + 8 x 10/100/1000 RJ-45 ports
<b>CNSIQ800-0P000</b>	IQ800 Switch - SFP Cage Only (No "plug ins")
<b>CNSIQ800-EP000</b>	IQ800 Switch - SFP Cage with PoE (8 Ports)
<b>CNSIQ800-0P0Y0</b>	IQ800 Switch - SFP Cage with Multicast (8 Ports)
<b>CNSIQ800-EP0Y0</b>	IQ800 Switch - SFP Cage with PoE and Multicast (8 Ports)
<b>CNSIQ800-0PC00</b>	IQ800 Switch - Copper backbone
<b>CNSIQ800-EPC00</b>	IQ800 Switch - Copper backbone + PoE (8 Ports)
<b>CNSIQ800-0PCY0</b>	IQ800 Switch - Copper backbone + Multicast (8 Ports)
<b>CNSIQ800-EPCY0</b>	IQ800 Switch - Copper backbone with PoE and Multicast (8 Ports)
<b>CNSIQ800-0PM00</b>	IQ800 Switch - Multimode fibre backbone
<b>CNSIQ800-EPM00</b>	IQ800 Switch - Multimode fibre backbone + PoE (8 Ports)
<b>CNSIQ800-0PMY0</b>	IQ800 Switch - Multimode fibre backbone + Multicast (8 Ports)
<b>CNSIQ800-EPMY0</b>	IQ800 Switch - Multimode fibre backbone + PoE + Multicast (8 Ports)
<b>CNSIQ800-0PS00</b>	IQ800 Switch - Singlemode fibre backbone
<b>CNSIQ800-EPS00</b>	IQ800 Switch - Singlemode fibre backbone + PoE (8 Ports)
<b>CNSIQ800-0PSY0</b>	IQ800 Switch - Singlemode fibre backbone + Multicast
<b>CNSIQ800-EPSY0</b>	IQ800 Switch - Singlemode fibre backbone + PoE + Multicast (8 Ports)

## Contact

### Control Network Solutions Ltd

Studio 7,

Intec 2,

Intec Business Park,

Wade Road,

BASINGSTOKE,

Hampshire, RG24 8AG, England

Tel: +44 (0) 1256 818700

Fax: +44 (0) 1256 812520

Email: [cns@control-network-solutions.co.uk](mailto:cns@control-network-solutions.co.uk)

Web: <http://www.control-network-solutions.co.uk>

eNode™ is the brand name and trade mark of CNS's IP hardware products and forms part of its family of IP Network Infrastructure Products (INIP's) for control networks. Quasar, IQ Switch, IQ100 are the trade marks of Quasar Technologies. No part of this publication may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, in part or in whole, without prior permission of Control Network Solutions. We reserve the right to make changes without notice to any products herein as part of its continued product development and improvements. We do not assume any liability arising out of the application or use of any product or circuit described herein.