# Clipsal Professional Active Series

10/100 Mbps Fast Ethernet Switches Series 4 - Ports Gigabit Switches Media Converter Series



# 10/100 Mbps Fast Ethernet Switches Series

The Clipsal Datacomms 10/100 Base Switches Series is a simple, high-speed networking solution designed for growing businesses. It's powerful enough to support your needs. New applications provide outstanding network availability, and help ensure access to the network from anywhere. The 10/100 Base Switches Series lets you scale your network as your requirements change.

For the Clipsal Datacomms 5 and 8 port 10/100 Base Switches, the 'Easy to install and use', 'Compact-sized design' and 'Simple Troubleshooting' concepts provide a very cost effective series which offers 10/100 Mbps auto-negotiating full-duplexing Ethernet ports.

The LEDs on the front panel allow network administrators to inspect the network status and easily diagnose problems. In addition, the 24-port Switch provides MDI auto detection. The 10/100 Base Switches Series help administrators get rid of complicated switching management by providing simple and easy installation and administration.

# **PRODUCT FEATURES**

- Complies with IEEE802.3u, 100Base-TX, IEEE802.3 10Base-T standards.
- 100Base-TX Fast Ethernet Switch.
- 24 port models, Filtering / Forwarding rate for 100Mbps is 14880pps and that for 10Mbps is 14880pps.
- 802.3x full-duplex flow control, half-duplex back-pressure flow-control to prevent packet lost for 16 & 24 ports switches.

### **CUSTOMER BENEFITS**

- In the 24 ports model, users do not have to worry if the cable connected is a straight through or cross over cable.
- By using Store & Forward technology, a faster error recovery rate can be achieved than if using cut-through technology.
- Network Bandwidth will be optimised by eliminating erroneous packets through Runt and CRC filtering.



Model: 95ESW16P10/



Model: 95ESW24P10/



Model: 95ESW5P10/ (top)
Model: 95ESW8P10/ (bottom)

#### **TECHNICAL SPECIFICATIONS**

Model	95ESW16P10/	95ESW24P10/
Standard Compliance	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX
Ports	16	24
Network Speed	TP: Auto-Negotiation, 10/20Mbps, 100/200Mbps	TP: Auto-Negotiation, 10/20Mbps, 100/200Mbps
Switching Topology	Store & Forward	Store & Forward
Filtering/ Forwarding Rate	100Mbps: 1488000 packets/second 10Mbps: 14880 packets/second	100Mbps: 1488000 packets/second 10Mbps: 14880 packets/second
MAC entry	8K-entry	4K-entry
LED indicator/port	3 (Link / Act, 100Mbps, FDX / COL)	3 (Link / Act, 100Mbps, FDX / COL)
Data Buffer	32K per port	32K per port
Power Supply	100-240VAC auto-sensing	100-240VAC auto-sensing
Operation Environment	Temperature: 0–50°C (Operating), –30–70°C (Storage) Humidity: 0–90% non condensing (Operating and Storage)	Temperature: 0-50°C (Operating), -30-70°C (Storage) Humidity: 0-90% non condensing (Operating and Storage)
Dimensions (mm)	400 x 172 x 45	400 x 172 x 45
Network Media	100 Base-TX: RJ45 STP/UTP, Category 5 Cable 10 Base-T: RJ45 STP/UTP Category 3-5 Cable	100 Base-TX: RJ45 STP/UTP, Category 5 Cable 10 Base-T: RJ45 STP/UTP Category 3-5 Cable
Certification	FCC class A, CE, CISPR Class A VCCI-I	FCC class A, CE, CISPR Class A VCCI-I
Safety	UL,TUV/GS (EN60950)	UL, TUV/GS (EN60950)

Model	95ESW5P10/	95ESW8P10/
Standard Compliance	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX
Ports	5-STP	8-STP
LED display	One for Power, Three for Speed Link / Active and FDX / COL per port	One for Power, Three for Speed Link / Active and FDX / COL per port
Dimensions (mm)	171 x 100 x 28	171 x 100 x 28
Power Requirement	7.5VDC, 800mA	7.5VDC, 800mA
Temperature	0-50°C (Operating), -10-70°C (Storage)	0-50°C (Operating), -10-70°C (Storage)
Humidity	10-80% non-condensing (Operating and Storage)	10-80% non-condensing (Operating and Storage)
Emission	FCC class A, CE	FCC class A, CE
Safety	Depends on power adaptor	Depends on power adaptor

# 4-Ports Gigabit Switches

Clipsal Datacomms Gigabit Ethernet Switch provides a backbone switch which allows up to 1000 Mbps UTP network switching functions. Its 10/100/1000 Mbps auto-negotiation function offers high networking flexibility. It is an ideal solution to connect different sub workgroup switches together with simple and easy installation. In addition, it provides a very cost effective way to upgrade your existing 10/100 base networks to 1000 base networks.

The port mirroring function allows administrators to monitor the traffic crossing any port in real time, and provides easy trouble shooting. Plug and play functionality allows for quick and simple installation.

### **TECHNICAL SPECIFICATIONS**

Model	95ESG4P10/
Ports	4 * 10 / 100 / 1000 Base-T RJ-45, MDI / MDI-X ports, 1 RS-232 DB-9 male
Dimensions (L x W x H, mm)	430mm(L) x 220mm(W) x 44mm(H) (1 unit)
Weight	2.5 kg
Power Requirement	100-240 VAC, 50-60 Hz
Power Consumption / Dissipation	45 Watts maximum / 150 BTU / hr maximum
Maximum Current (@110 /240VAC)	0.50A / 0.20A
Switching Technology	Store & Forward
Address Table	1K entries, auto learning / ageing
Queue Buffer	2MB per 1000 Mbps port
Flow Control	Back pressure for half duplex, IEEE 802.3x for full duple:
Packet Control	Runt & CRC filtering, Broadcast storm control
Switch Management	
System Management	Console port
VLAN's	Up to 4 groups
Link Aggregation	IEEE802.3ad, 2–TP ports per trunk
Port Mirroring	Mirroring port's in /out, in, out traffic
Traffic Prioritisation	Supports four levels of priority
Standard Compliance	
CE Mark	EN50081-1, EN55022 Class A; EN50082-1, IEC 1000-4-2 / 3 / 4 5 / 6
Emissions	FCC Class A, VCCI Class A, CISPR 22 Class A
Safety	CSA / NRTL (C.22.2.950, UL1950), TUV / GS (EN60950)
Immunity	IEC 801-2 / 3 / 4, EN60555-2 Class A, EN60555-3
Temperature	IEC 68-2-14, Standard Operating: 0 to 50°C (32~122°F) Storage -40 to 70°C (-40~158°F)
Humidity	5% to 95% (Non-condensing)
Standard	IEEE 802.3 (Ethernet), IEEE 802.3u (Fast Ethernet),
	IEEE 802.3ab (Gigabit Ethernet), IEEE 8023x (flow contr



### **PRODUCT FEATURES**

- 4 RJ-45 ports, 10/100/1000Mbps Ethernet Switch which support 10Base-T, 100Base-TX, and 1000Base-T for 10/100/1000Mbps bandwidth.
- 64Mbit shared data memory buffering.
- Port mirroring allows you to monitor the traffic status any port in real time.
- Built-in IEEE802.1p four priority queues each port.

### **CUSTOMER BENEFITS**

- Uses Stored & Forward technology for a faster error recovery rate than the cut-through technology
- 1M MAC address table, automatic source address learning and ageing.
- Trunk port support for other brands switches linkage.

# Media Converter Series

Clipsal Datacomms Media Converters are designed to connect copper and fibre optic media. They provide a simple and easy way to extend the connection distance between Fast Ethernet UTP networks via optical fibre cabling, without performance degradation. Clipsal Media Converters are an ideal solution for extending distances between servers and workgroups located on different floors or different buildings.

# **PRODUCT FEATURES**

## Model: 95MC100STRJ & 95MC100SCRJ

• Converts 100Base-TX STP interface to 100FX(ST/SC) interface. The fibre port of converter operates at 1300mm and uses SC, ST connectors.

### **CUSTOMER BENEFITS**

- Users can extend the copper networks limited distance by using the fibre network.
- Easy product installation and management.



100TX-100FX (ST) Multi-mode Fibre Converter

### **TECHNICAL SPECIFICATIONS**

Model	95MC100STRJ	
	95MC100SC100	
Protocol	IEEE 802.3u, 100 Base-FX, 100 Base-TX	

### **Connectors and Cables**

Twisted Pair STP	RJ45, Category 5 (EIA/TIA 568)
Multi-mode Fibre	50/125μm, 62.5/125μm

# **Support Distances**

Twisted Pair STP	100m / 328ft.
Multi-mode Fibre	412m / 1,350ft. (Half-Duplex), 2km / 1.2mi. (Full-Duplex)
Dimensions	70mm(L) x 94mm(W) x 26mm(H)
Weight	210g (net)
Power	5V DC, 1A, max.

## **Environmental**

Temperature	0-40 °C
Humidity	0-90% (non-condensing)