


GarrettCom®

A WORLD CLASS COMPANY

GarrettCom... leading the way in manufacturing and supplying industrial grade Ethernet products for over 20 years

ETHERNET LEADERSHIP

Unrivalled experience in transportation, security, automation, carrier & telecommunications, utilities and military & defence industries.

SUPPORTED...

By a comprehensive three year warranty, ISO9001 certification and an installed base of more than 50 million node connections.

REPRESENTATIVE CUSTOMERS
INCLUDE:

Serco, BAE, GE, Red Electrica, Network Rail, Danish State Railways, Ultra Electronics, Finmeccanica group, Cegelec...

ETHERNET PRODUCTS THAT ARE TOUGHER, SMARTER & MORE ROBUST, WITHSTANDING ANY EXTREME ENVIRONMENT

TOUGHER

GarrettCom produces hardened Ethernet products by housing all components in a tough metal casing. The components themselves are all made of premium quality materials and are thoroughly tested to ensure operation whatever the conditions, from -50°C to 85°C, in high or low humidity, in dusty or corrosive conditions.

SMARTER

The importance of monitoring and managing industrial Ethernet networks, is rapidly increasing as the levels of automation develop. Our products provide all the latest functionality to ensure high levels of security combined with excellent monitoring and management.

MORE ROBUST

GarrettCom manufactures the most robust Ethernet devices available. All products are designed to provide high MTBFs and extreme EMC characteristics. MTBF figures are calculated using the Bellcore Telcordia method commonly used for military applications.

KEY FEATURES REVIEW

- Extended operating temperatures of -50°C to 85 °C
- Extensive fibre options (SC, ST, LC, MTRJ, Single Mode & Multimode)
- AC and DC power options
- Dual source power options
- Conformal coating
- M12 connectors
- UL, CE/IEC, FCC and CB complaint
- Hardened construction with metal casings
- Market leading security features
- Variety of mounting options
- DIN-Rail mountable
- 19" RETMA/23" ETSI rack mountable
- Reverse mountable - cables rear/LED's at front

STANDARDS



IEC 61850
(and IEEE 1613)
for power substation
and utilities automation.



NEMA TS-2 and
TEES standards
for traffic control
applications.



Full range of DNV
compliant products
pending, for use in
marine applications.



EN50155 &
EN50121 certified
for use in railway
applications.



Conformal coating, ATEX,
Class 1 Div 2 certified for
use in hazardous areas in
oil, gas and petrochemical
applications.



ETSI and NEBS L3
standards for carrier
class applications in
the telecoms market.



All products fully
compliant with
RoHS standards.


GarrettCom®

SOLUTIONS FOR...

Industrial automation

Military and defence

Oil, gas and
petrochemicals

Power utilities

Security and
surveillanceTelecommunications
and carrierTraffic control and
transportation

Water treatment



PRODUCT RANGE

Managed and
unmanaged Ethernet
switchesConverter and edge
switches

Serial device routers

Media Converters

Ethernet hubs and
repeaters

Power Over Ethernet switches

Comprehensive management
and security software
GarrettCom®
**PRODUCT
GUIDE**

GarrettCom Europe Ltd

GarrettCom Inc.

Haslar Marine Technology Park
Haslar Road
Gosport
Hampshire
PO12 2AU
UK47823 Westinghouse Drive
Fremont
CA 94539
USAT : +44 (0) 870 3825 777
F : +44 (0) 870 3825 098
W: www.garrettcom.co.uk
E: sales@garrettcom.co.ukT : +1 (510) 438-9071
F : +1 (510) 438-9072

WWW.GARRETTCOM.CO.UK

Industrial Networking at Its Best™

MANAGED SWITCHES
(RACK MOUNT WITH FANS)



- 6K32F** - up to 32 ports, configurable for all media and port types, up to eight Gigabit or 32 fibre ports.
- 6K32FR** - same as above but reverse mount.
- 6K32T** - rack-mount package, 16 copper and up to 16 fibre and/or up to four Gigabit ports.
- 6K32TR** - same as above but reverse mount.
- 6K25e** - up to 26 ports, configurable for all media and port types, up to eight Gigabit and/or 24 fibre ports.
- 6K25Re** - same as above but reverse mount
- 6K16** - up to 16 ports, configurable for all port and media types. Two 6K16's side-by-side fit in a 1U 19" rack.
- 6K16V** - up to 16 ports, configurable for all port and media types. Vertically mounted. Type test rating -50°C to 95°C.

MANAGED SWITCHES
(HARDENED WITHOUT FANS)



- 12KX** - Layer 3 substation hardened ethernet switch with 16 Gigabit RJ45+SFP fibre combo ports. IEEE 1588v2 timing
- 10KT** - convection cooled, up to 36 ports, configurable for all media and port types, up to four Gigabit and 32 fibre ports. IEEE 1588v2 timing and industry first, dual hot-swap power supplies.
- 6K32FC** - convection cooled, up to 32 ports, configurable for all media and port types, up to eight Gigabit or 32 fibre ports.
- 6K32TRC** - up to 32 ports, advanced patented thermal design, convection-cooled, reverse 1U rack-mount, configurable with 16 copper and up to 16 fibre and/or up to 4 Gigabit ports.
- 6KQ** - managed field switch with up to 16 ports of all media and connector types; advanced thermal design; metal case with a ribbed surface for optimum heat dissipation.
- 6KQE** - similar to 6KQ but with up to 10 ports max, AC power option and a RS232 console port.
- 6KL** - up to ten ports with fibre options, compact and configurable, managed, DIN rail mountable and IP52 rated. ten ports with fibre options, compact and configurable, managed, M12 connectors, DIN rail mountable and IP52 rated.
- 6K8** - up to eight ports, compact and configurable, managed field switch; IP52-rated, metal case acts as a heat sink.

UNMANAGED SWITCHES
(RACK MOUNT WITH FANS)



- 4K8** - eight port 10/100Mb with single duplex fibre port option.
- 4K16** - 16 port 10/100Mb with dual duplex fibre port option.
- 4K24** - 24 port 10/100Mb with dual duplex fibre port option.
- 4K220** - 40 port 10/100Mb.

UNMANAGED SWITCHES
(SMALL SIZE)



- S14** - four port switch, 10/100Mb.
- ES42** - six port switch with dual or single fibre options and LLL.
- ESD42H/P** - six port switch with dual or single fibre options and dual homing, redundancy technology.
- PS14H/P** - (PoE) four PoE ports in a compact switch. Type test rating -40°C to 85°C.
- PES42H/P** - (PoE) four port switch with an additional two ports with dual or single fibre options. Type test rating -40°C to 85°C.
- S14H/P** - four port switch. Type test rating -50°C to 100°C.
- ES42H/P** - six port switch with dual or single fibre options. Type test rating of -50°C to 100°C.
- CP80/F** - eight port 10/100Mb switch with an optional fibre port.

MEDIA CONVERTERS



- TB14/H** - BNC to RJ45 media converter.
- 14E/EH** - 100Mb fibre to RJ45 media converter.
- FT14/H** - 10Mb fibre to RJ45 media converter.

GarrettCom produce a variety of 10Mb, 10/100Mb, and mixed media hubs. The range starts from five ports and goes to 24 ports - most with AC or DC power variants.

POWER OVER ETHERNET (PoE)

GarrettCom offers a range of different Power over Ethernet (PoE) products with four and eight port modules, which will fit into the 6K series of managed switches and the smaller, rugged switches like the PES42P and PS14H.

CONVERTER SWITCHES



Combine a Media Converter with a small Ethernet Switch and you get a Converter Switch. Our converter switches offer two copper ports and one fibre port.

- CSG14UH/P** - Converts any Gigabit fibre to RJ45
- CSG14H/P** - Gigabit fibre to RJ45
- CS14** - 100Mb fibre to RJ45 (two switched RJ45 ports)
- CSN14** - 10Mb fibre to RJ45 (two switched RJ45 ports)

SERIAL TERMINAL SERVERS/ROUTERS



- DX40** offers two Serial and two Ethernet ports (including fibre), combining features of a Serial Device Server, Ethernet Switch and IP Router in a single product.
- DX940** offers up to four 10/100 Ethernet ports, configurable as RJ45 ports or SFP ports as well as two optional Gb Ethernet ports. Four serial ports may be added. WAN ports are optional, available as cellular, T1/E1 or Frame Relay.
- DX1000 TS/IFR** offers 12 Serial, five Ethernet ports and a WAN port, combining features of a Serial Device Server, Ethernet Switch and IP Router in a single product.



- 10ETS** - up to 32 serial ports, and up to eight Ethernet ports, configurable IIRIG-B Timing Modules ports and industry first, dual hot-swap power supplies.
- DynaStar 1500 Ethernet Terminal Server** (DS1500-ETS) integrates three often discrete networking functions: Terminal Server (Async serial device support), Ethernet switch (local switching and router access), and IP Router.
- DynaStar 1500 Industrial Frame Router** (DS1500 - IFR) in a single product, the DS1500-IFR integrates five often discrete networking functions: Terminal Server, Ethernet switch, IP Router, Frame Relay Access Device, and DSU/CSU.

DYMEC LINKS CONVERTERS



- Links Single Channel Serial Media Converter** converts RS232 or TTL level copper to amplitude based fibre output.
- Links Multi-Channel Serial Media Converter** full duplex converter for RS232 or TTL level copper to amplitude based fibre output.
- Links RS485 Serial Media Converter** hardened media converters and repeaters for EIA 422 and 485 data connections.

SOFTWARE

- MNS-6K software** with RSTP2004, SNMP, VLANs, Secure Web Management, CLI, RSTP, Telnet, DHCP, SSH, SSL, Access Control, RADIUS, TACACS+, and more.
- MNS-6K-SECURE software** for those demanding extra security in their networks. Offers all of MNS-6K software features plus RADIUS IEEE 802.1x, TACACS+, Secure FTP, SSH, SSL, SNMP Server and more.
- S-Ring** redundancy manager software product, built upon networking industry standards enabling 6K switches to simplify and speed up recovery of faults within a LAN ring structure.
- MNS-DX software** for DX products, includes IP routing, serial-IP terminal services, Ethernet switching, frame-relay based routed and non-routed WAN services. Also includes stateful firewall and world-class VPNs for security and advanced networks.

CONFORMAL COATING

Conformal coating refers to a protective coating designed to conform to the surface of an assembled printed circuit or PWA. This coating protects the circuitry from humidity, moisture, dust, and corrosion which can be caused by exposure to extreme environments and is an option on all GarrettCom industrial Ethernet products.

INDUSTRIAL ETHERNET TRAINING

- GCNA Training Course**
GarrettCom's main training course provides engineers with a clear and concise coverage of introductory and intermediate networking topics and is held at GarrettCom's training facilities in Gosport, Hampshire, UK. Visit www.gcna.co.uk for more information.
- Two day 'Customer Specific Training' Course**
This course aims to focus on areas that are relevant to a specific customer requirement, and can include more advanced topics that are not covered on the GCNA course. The courses can run at the customer's premises or at our training facility in Gosport, and dates are flexible. Visit www.gcna.co.uk for more information.

Online Training Resources
GarrettCom Training houses a library of complimentary networking training videos and Ethernet resources. Members can get a great introduction into the fundamentals of networking, and learn about switch settings, multicasting, redundancy protocols, file management, network management and many more topics. Visit www.garrettcomtraining.com to register for free.

