

Sichere IOLAN STG-Terminalserver

 perle.com/products/iolan-stg-terminal-server.shtml

Seriell zu Ethernet-Terminalserver

- 4 oder 8 serielle RS232 auf RJ45-Ports
- 10/100/1000-Ethernet
- Kleine kompakte Größe
- Wand-, Tisch- oder DIN-Schienenmontage
- Erweiterte Sicherheitsfunktionen



Ingenieure und Projektmanager, die eine kostengünstige serielle **RS232-zu-Ethernet-** Lösung mit 4 oder 8 Ports benötigen, die die Integrität des seriellen Geräteprotokolls über Ethernet aufrechterhält, müssen das IOLAN STG in Betracht ziehen. Mit dem leistungsstärksten verfügbaren Prozessor und der einzigartigen TrueSerial™-Technologie von Perle bietet das IOLAN STG die authentischsten seriellen Verbindungen über Ethernet. Serielle Terminalserver von IOLAN STG4-P sind auch mit Unterstützung für Power over Ethernet (PoE) erhältlich.

IOLAN STG Secure Serial Terminal Server sind ideal für:

- Ingenieure und Projektmanager, die eine leistungsstarke Seriell-zu-Ethernet-Schnittstelle für bis zu 4 oder 8 serielle RS232-basierte Geräte benötigen. Verbinden Sie sich mit seriell basierten Anwendungen über Ethernet
- Kompakte Größe bietet die kleinste 4- oder 8-Port Seriell-zu-Ethernet-Lösung auf dem Markt

Warum IOLAN STG Secure Terminal Server die bevorzugte Wahl sind:

- Hochleistungsprozessoren für den besten verfügbaren Durchsatz. Ideal für zeitkritische Anwendungen
- Kompakte Größe bietet die kleinste 4-Port-Seriell-zu-Ethernet-Lösung auf dem Markt
- IP-Unterstützung der nächsten Generation (IPv6) für Investitionsschutz und Netzwerkkompatibilität
- TrueSerial™-Pakettechnologie – die authentischsten seriellen Verbindungen über Ethernet gewährleisten die Integrität des seriellen Protokolls
- Die Primary/Backup-Host-Funktionalität ermöglicht automatische Verbindungen zu alternativen Hosts, falls die primäre TCP-Verbindung ausfällt
- EasyPort Web – Greifen Sie mit Ihrem Java-fähigen Internetbrowser auf die seriellen Konsolenanschlüsse von Geräten zu
- TruePort – Der com/tty-Redirector von Perle für seriell basierte Anwendungen läuft unter Windows, Vista, Linux, Solaris, SCO und Unix
- Clustering – Bietet eine einzige Ansicht aller Out-of-Band-Konsolenports. Ideal für große Rechenzentren
- FIPS 140-2 – Kryptografische Module erfüllen die NIST-Konformität der US-Regierung
- Dynamisches DNS – Einfacher Zugriff auf die Konsolenverwaltung von überall im Internet
- Intelligentes Aus- und Wiedereinschalten von Geräten mit Perle Remote Power Switches
- Java-freier Browserzugriff auf serielle Remote-Konsolenports über Telnet und SSH

- Ping-Watchdog-Probes ermöglichen es Kunden, Geräte mit angeschlossenen RPS-Netzschaltern von Perle im Falle eines nicht reagierenden Netzwerkgeräts aus- und wieder einzuschalten
- Lebenslange Garantie – bester Investitionsschutz verfügbar

Softwarefunktionen - Serielle Terminalserver IOLAN STG

Zugriff auf den seriellen Port

Verbinden Sie sich direkt über Telnet / SSH nach Port und IP-Adresse

Verbinden Sie sich mit dem EasyPort-Menü über Telnet / SSH

Verwenden Sie einen Internetbrowser für den Zugriff über HTTP oder sicheres HTTPS über das EasyPort Web-Menü

Java-freier Browserzugriff auf serielle Remote-Konsolenports über Telnet und SSH

Ports kann eine bestimmte IP-Adresse zugewiesen werden (Aliasing)

Multisession-Fähigkeit ermöglicht mehreren Benutzern den gleichzeitigen Zugriff auf Ports

Multihost-Zugriff ermöglicht mehreren Hosts/Servern die gemeinsame Nutzung serieller Ports

Barrierefreiheit

In-Band (Ethernet) und Out-of-Band (DFÜ-Modem) Unterstützung

Dynamisches DNS ermöglicht es Benutzern, einen Konsolenserver von überall im Internet zu finden

Domännennamensteuerung über DHCP-Option 81

Unterstützung für IPv6- und IPv4-Adressierung

Verfügbarkeit

Primary/Backup host functionality enables automatic connections to alternate host(s)

Security

SSH v1 and v2

PCI DSS Compliance: TLS v1.2, TLS v1.1, TLS v1.0, SSL v3.0, SSL v2.0

SSL Server and SSL client mode capability

SSL Peer authentication

IPSec VPN : NAT Traversal, ESP authentication protocol

SSH ciphers: AES-CTR, AES-GCM and ChaCha20-poly1305

SSL encryption: AES-GCM, key exchange ECDH-ECDSA, HMAC
SHA256, SHA384

Encryption: AES (256/192/128), 3DES, DES, Blowfish, CAST128,
ARCFOUR(RC4), ARCTWO(RC2)

Hashing Algorithms: MD5, SHA-1, RIPEMD160, SHA1-96, and MD5-96

Key exchange: RSA, EDH-RSA, EDH-DSS, ADH

X.509 Certificate verification: RSA, DSA

Certificate authority (CA) list

Local database

RADIUS Authentication, Authorization and Accounting

TACACS+ Authentication, Authorization and Accounting

LDAP, NIS, Kerberos Authentication

RSA SecureID-agent or via RADIUS Authentication

SNMP v3 Authentication and Encryption support

IP Address filtering

Disable unused daemons

Active Directory via LDAP

Terminal Server

Telnet

SSH v1 and v2

Rlogin

Auto session login

LPD, RCP printer

MOTD - Message of the day

Serial machine to Ethernet

Tunnel raw serial data across Ethernet - clear or encrypted

Raw serial data over TCP/IP

Raw serial data over UDP

Serial data control of packetized data

Share serial ports with multiple hosts/servers

Virtual modem simulates a modem connection - assign IP address by AT phone number

Virtual modem data can be sent over the Ethernet link with or without SSL encryption

TruePort com/tty redirector for serial based applications on Windows, Linux, Solaris, SCO, HP UX, NCR UNIX and AIX. For a complete list of all the latest drivers click here

TrueSerial packet technology provides the most authentic serial connections across Ethernet ensuring serial protocol integrity

RFC 2217 standard for transport of serial data and RS232 control signals

Customizable or fixed serial baud rates

Plug-ins allow customer or Perle provided plug-ins for special applications

Software Development Kit (SDK) available

Serial encapsulation of industrial protocols such as ModBus, DNP3 and IEC-870-5-101

ModBus TCP gateway enables serial Modbus ASCII/RTU device connection to ModBus TCP

Data logging will store serial data received when no active TCP session and forward to network peer once session re-established - 32K bytes circular per port

Console Management

Sun / Oracle Solaris Break Safe

Local port buffer viewing - 256K bytes per port

External port buffering via NFS, encrypted NFS and Syslog

Event notification

Manage AC power of external equipment using Perle RPS power management products

Clustering - central console server enables access ports across multiple console servers

Windows Server 2003/2008 EMS - SAC support GUI access to text-based Special Administrative Console

Ping watchdog probes enable customers to power cycle equipment with attached Perle RPS power switches in the event of an unresponsive networking gear

Remote Access

Dial, direct serial PPP, PAP/CHAP, SLIP

HTTP tunneling enables firewall-safe access to remote serial devices across the internet

Automatic DNS Update Utilize DHCP Opt 81 to set IOLAN domain name for easy name management and with Dynamic DNS support , users on the Internet can access the device server by name without having to know its IP address. See Automatic DNS update support for details

IPSEC VPN client/servers Microsoft L2TP/IPSEC VPN client (native to Windows XP)

Microsoft IPSEC VPN Client (native to Windows Vista)

Cisco routers with IPSEC VPN feature set

Perle IOLAN SDS/STS and SCS models

OA&M (Operations, Administration and Management)

SNMP V3 - read and write, Perle MIB

Syslog

Perle Device Manager - Windows based utility for large scale deployments

Configurable default configuration

Installation Wizard

Set a Personalized Factory Default for your IOLANs

Protocols

IPv6, IPv4, TCP/IP, Reverse SSH, SSH, SSL, IPsec/IPv4, IPsec/IPv6, L2TP/IPsec, CIDR, RIPV2/MD5, ARP, RARP, UDP, UDP Multicast, ICMP, BOOTP, DHCP, TFTP, SFTP, SNTP, Telnet, raw, reverse Telnet, LPD, RCP, DNS, Dynamic DNS, WINS, HTTP, HTTPS, SMTP, SNMPV3, PPP, PAP/CHAP, SLIP, CSLIP, RFC2217, MSCHAP

Hardware Specifications - IOLAN STG Serial Terminal Servers

Processor 600 Mhz ARM processor

Memory

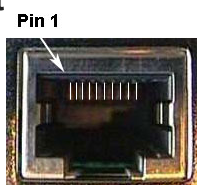
RAM MB	512
Flash MB	4000
Interface Ports	
Number of Serial Ports	4 or 8
Serial Port Interface	RS232 DTE on RJ45 (10 pin)
Sun / Solaris	Sun / Oracle 'Solaris' Safe - no "break signal" sent during power cycle causing costly server re-boots or downtime
Serial Port Speeds	300bps to 230Kbps with customizable baud rate support
Data Bits	Configurable for 5,6,7 or 8-bit protocol support Use TruePort to transparently pass 9-bit serial data
Parity	Odd, Even, Mark, Space, None
Flow Control	Hardware, Software, Both, None
Serial Port Protection	15Kv Electrostatic Discharge Protection (ESD)
Local Console Port	RS232 on RJ45 with DB9 adapter (provided)
Network	Network Autosensing 1000Base-T / 100Base-TX / 10Base-T Auto-MDIX
	Software selectable Ethernet speed 10/100/1000 Auto
	Software selectable Half/Full/Auto duplex
Ethernet Isolation	1.5Kv Magnetic Isolation
Power	
Power Supply	120 V AC (USA), 230V AC (International) Wall Power Adaptor included
Power Supply Options	Power via External power 9-30v DC, 4.8 Watts uses standard 5.5mm x 9.5mm x 2.1mm barrel socket
	4 & 8 Port: Power IN over serial cable
Nominal Input Voltage	12v DC / 24v DC
Input Voltage Range	9-30v DC
Power IOLAN over Serial	4 Port: 9-30v DC 8 Port: 9-30v DC
Power External Device via Serial Port	N/A

Typical Power Consumption @ 12v DC (Watts)	4 Port: 2.0 8 Port: 2.7
Indicators	
	Power/System Ready
	Network Link activity
LEDs	Serial: Transmit and Receive data per port
Environmental Specifications	
Heat Output (BTU/HR)	4 Port: 16.38 8 Port: 9.20
	4 Port: 259,560 8 Port: 171,852
MTBF (hours)	Calculation model based on MIL-HDBK-217-FN2 @ 30 °C
Operating Temperature	0C to 55C, 32F to 131F
Storage Temperature	-40C to 85C, -40F to 185F
Humidity	5 to 95% (non condensing) for both storage and operation.
Case	SECC Zinc plated sheet metal (1 mm)
Ingress Protection Rating	IP30
	Wall mount - bracket included
Mounting	DIN Rail bracket optional
Product Dimensions	
Weight	4 Port: 0.35 kg (0.77 lbs) 8 Port: 0.55 kg (1.2 lbs)
Dimensions	4 Port: 112 x 82 x 28 (mm), 4.4 x 3.2 x 1.1 (in) 8 Port: 112 x 156 x 28 (mm), 4.4 x 6.1 x 1.1 (in)
Packaging	
Shipping weight	4 Port: .66 kg (1.46 lbs) 8 Port: 1.3 kg (2.9 lbs)
Shipping Dimensions	260 x 170 x 70 (mm), 10.2 x 6.7 x 2.8 (in)
Regulatory Approvals	
Emissions	CFR47 FCC Part 15 Subpart B:2015

	ICES-003:2016 Issue 6:2016
	CISPR 32:2015/EN 55032:2015 (Class A)
	EN55011 (CISPR11)
	CISPR 16-2-3:2010/A2:2014
	EN61000-3-2:2014, Limited for Harmonic Current Emissions
	EN61000-3-3:2013, Limits of Voltage Fluctuations and Flicker
	CISPR 24:2010/EN 55024:2010
	EN61000-4-2: 2009 Electrostatic Discharge
	EN61000-4-3: 2006/A2:2010: RF Electromagnetic Field Modulated
	EN61000-4-4: 2004 Fast Transients
	EN61000-4-5: 2006 Surge
	EN61000-4-6: 2009 RF Continuous Conducted
	EN61000-4-8: Power-Frequency Magnetic Field
Immunity	EN61000-4-11: Voltage Dips and Voltage Interruptions
Safety	UL/EN/IEC 62368-1 (previously 60950-1) CAN/CSA C22.2 No. 62368-1
	<u>Reach, RoHS and WEEE Compliant</u>
	ECCN - 5A992
	HTSUS Number: 8517.62.0020
Other	Perle Limited Lifetime Warranty

IOLAN RJ45 Serial Connector Pinout

RJ45 Socket



Pinout	Direction	EIA-232
1		Power In (9-30V DC)
2	in	DCD
3	out	RTS
4	in	DSR

5	out	TxD
6	in	RxD
7		GND
8	in	CTS
9	out	DTR
10		Power Out

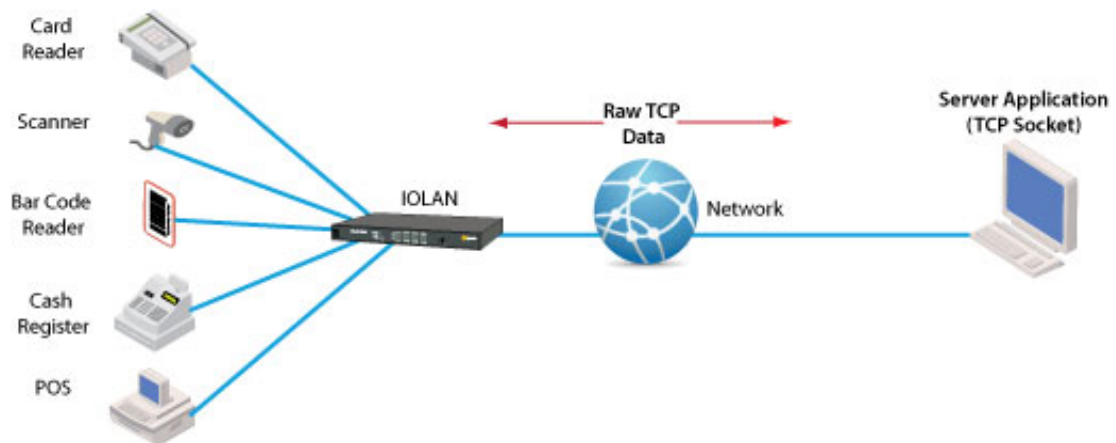
Optional Perle adapters for use with straight thru CAT5 cabling

Find IOLAN STS4-D or STS8-D

TCP

Using RAW TCP Sockets

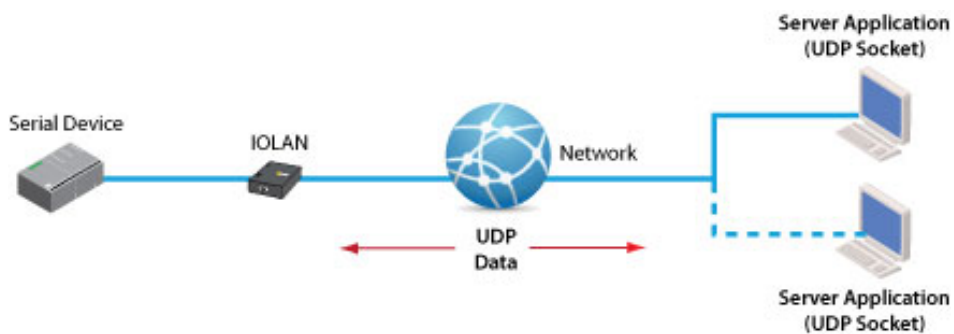
A raw TCP socket connection which can be initiated from the serial-Ethernet device or from the remote host/server. This can either be on a point to point or shared basis where a serial device can be shared amongst multiple devices. TCP sessions can be initiated either from the TCP server application or from the Perle IOLAN **serial-Ethernet** adapter.



UDP

Using Raw UDP Sockets

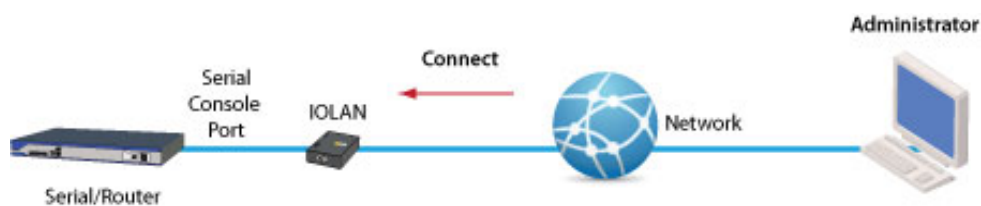
For use with UDP based applications, Perle IOLANs can convert serial equipment data for transport across UDP packets either on a point to point basis or shared across multiple devices.



Console Server

Console Management

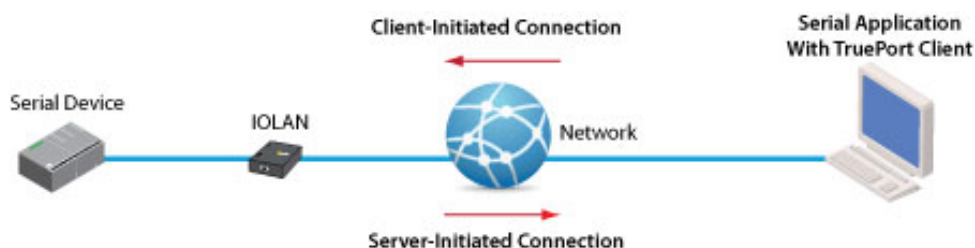
For access to remote console ports on routers, switches, etc, Perle IOLAN's enable administrators secure access to these RS232 ports via inband Reverse Telnet / SSH or out of band with dial-up modems. Perle IOLAN models with integrated modems are available.



COM/TTY

Connect Serial-based Applications with a COM/TTY Port Driver

Serial ports can be connected to network servers or workstations running Perle's TruePort software operating as a virtual COM port. Sessions can be initiated either from the Perle IOLAN or from TruePort.



Tunneling

Serial Tunneling between two Serial Devices

Serial Tunneling enables you to establish a link across Ethernet to a serial port on another IOLAN. Both IOLAN serial ports must be configured for Serial Tunneling (typically one serial port is configured as a Tunnel Server and the other serial port as a Tunnel Client).



Virtual Modem

Virtual Modem

Enables the serial-Ethernet adapter to simulate a modem connection. When connected to the IOLAN and initiates a modem connection, the IOLAN starts up a TCP connection to another IOLAN serial-Ethernet adapter configured with a Virtual Modem serial port or to a host running a TCP application.

