Teldat-iM8

Teldat-iM8 corporate router

Introduction

The Teldat-iM8 is a powerful and flexible router thanks to a optimized hardware architecture capable of delivering symmetrical 1000 Mbps services.

Its small size means that no fan is required, the customer can place it in work areas because it does not produce any noise.

The device is scalable thanks to an expansion slot with a wide variety of cards, a built-in Ethernet/Fiber connection, a LAN Gigabit Ethernet switch, a Wi-Fi access point and a 3G/4G/4G+ connection.

Destacar

- **Up to 1000 Mbps symmetrical services**
- **Traditional or SDWAN integrated router**
- **One card slot(SFP, VDSL, G.SHDSL, E1, Serial, etc)**
- **Optional 3G/4G/4G+ integration + USB port**
- **Licensable, built-in Wi-Fi access point**
- **Advanced software, IPSec, ToIP, CLI**
- **No fan, silent**

Interfaces

Expansion slot.	Cards: SFP, VDSL, Switch, E1, Serial.
Electrical/optical port	Optional (remotely activated)
Mobile access (3G/4G/4G+)	Optional (factory-installed)
8-port Gigabit Ethernet switch	Yes
Wi-Fi 802.11n access point (2.4-5 GHz)	Optional (remotely activated)
USB port for 3G/4G modems	Yes
Console port	Yes
Reset button	Yes

Competitive Advantage

Powerful and scalable platform	Up to 1000Mbps (no additional HW needed), GE/SFP WAN connection and a slot to cover Fiber, xDSL, E1/T1, Serial, Ethernet PoE switch options.
SDWAN router	Teldat-iM8 enables smooth transition from traditional communications in remote offices to a hybrid SD-WAN network.
Extensive connectivity	Eight 10/100/1000 Ethernet ports with advanced VLAN functions, 802.1p/q/x and Wi-Fi 802.11n access point. Optional PoE on 4 ports(Max. 12xPoE ports).
Designed for work areas	Suitable for office installation: the absence of fans means there is no noise. In-depth status information provided by a 14 LED panel.

Key Features

- **Up to 1000 Mbps** Reliable in scenarios of up to 1 Gbps symmetrical (IMIX) with services thanks to its powerful hardware architecture with hardware encryption.

- **Electrical/optical connection and expansion slot** Built-in electrical/optical Gigabit Ethernet interface and a slot to accommodate any connectivity scenario, whether single or redundant.

- **Onboard 8xGE switch** The built-in switch is ideal for small offices because it eliminates the need for an external switch, thus reducing costs and points of failure. GE, duplex, self-negotiable ports with optional PoE.

- **Security: Firewall, IPSec, etc.** Corporate communications require corporate security. The Teldat-iM8 provides free of charge state-of-the-art security: ACLs, Firewall(L3-L7), 802.1x, IPSec (optional hardware encryption), etc.

- **No fan. Silent** Lack of space in small offices often means that routers have to be placed in the work area. The Teldat-iM8 is specially designed for such enviroments. Since the router does not need a fan, it does not produce any noise.

- **High VPN performance** Powerful CPU with hardware encryption available as an option.

- **3G/4G/4G+ connection** 4G-LTE wireless access is the perfect backup medium as it uses different infrastructure to fixed connections. You can also utilize 4G-LTE and fixed connections simultaneously for load-balancing purposes.

- **Wi-Fi access point** The Teldat iM8 can also be an 802.11n Wi-Fi access point (2.4/5 GHz) with 2x2 MIMO antenna technology and/or access point controller. With SSID support for guests and a captive portal.

- **Advanced services** The Teldat-iM8 software includes all the advanced functions needed in coporate networks and carrier services, ready for the most demanding scenarios like MPLS and managed services.

- **Console port** Operator/integrator managed services require out-of-band management to prevent them from interfering with customer networks. The consolte port is the most common method.

CARACTERíSTICA TéCNICA DEL HARDWARE

Expansion slot.
WAN cards: Fiber, ADSL/VDSL, Fiber + ADSL/VDSL, G.SHDSL, E1/T1, Serial
LAN cards: 8xGE with optional PoE
WAN + LAN card: 4 x GE Switch Extension/WAN Port configurable

Local Ethernet and Wi-Fi connection (licensable, optional)
8-port Ethernet switch 10/100/1000. Optional PoE on 4 ports(RJ45 connector)
Selectable 802.11abgn access point mode (2.4/5 GHz)
2x2 MIMO with external antennas (SMA connector)

Dimensions and Weight
L x W x H: 275 x 310 x 44 mm
Approximate weight: 2.5 Kg
Format: Desktop and additional rack mount bracket

Optical/electrical Gigabit interface
SFP optical interface and RJ45 electrical interface (mutually exclusive)
Optical interface: 1000 Mbps(1000BaseX) LX/LH-SX-ZX
Electrical interface: 10/100/1000 Mbps

WWAN interface (optional)
Built-in hardware module with 3G/4G/4G+ technology
2 external antennas with SMA connector
Support for additional USB modules

Environmental specifications
Temperature: 0 to 40 ºC, Relative humidity: 5 to 90%
Atmospheric pressure: 700 to 1060 mbars
Power supply range btw 100 to 240 VAC and 50 to 60Hz

CARACTERíSTICA TéCNICA DEL SOFTWARE

IP protocol
ARP, ARP Proxy, MTU discovery, NAT/PAT, ECMP, BFD
RIPv1/2,OSPFv3,BGPv4,Load balancing,PBR-Policy Based static/dynamic Routing
Virtual Router Forwarding (Multi-VRF)

Security
IPSec support in transport and tunnel mode. DMVPN
Pre-shared authentication, RSA, Certificates, MDS, SHA-1
Encrypted: DES (56 bits), 3DES (168 bits), AES (128, 192 and 256 bits)

IP services
DHCP, DNS, FTP, SFTP, SSH server v1/2, Telnet server and client
NTP, LDAP, Syslog, SCP client. TFTP server
DHCP, dynDNS relay

IPv6
Dual Stack, IP6oIPv4, IPv4oIPv6, GRE, 6rd, DHCP, ICMPv6, SLAAC
Static and dynamic routing RIPng, OSPFv3, MP-BGP
Multicast: MLD, MLDv2, Listener, Querier

Management
CLI configuration and storage in a plain text file
Cloud Net Manager tool(HTTPS based)
RADIUS and TACACS+ AAA support, Netflow, RMON, SNMPv1, v2c y v3

IP protocol (2)
Multicast: IGMP (v1,v2, v3), PIM-SM, PIM-SSM, MSDP, MLD, MLDv2
IPSLA service probes (delay, package loss, jitter)
High availability: VRRP, TVRP (HSRP compatible)

Security (2)
Certificates: CSR, SCEP, X.509v3, PKIX, LDAP revocation
Static and dynamic access lists(ACLs) and session-based Firewall
DoS/DDoS detection

Quality of Service QoS
IP Precedence, DiffServ and COS labeling for BW management
BW prioritization and limitation
Up to 16 queues per interface. PQ,LLQ,WFQ,CBWFQ,WRED

VoIP
Protocols: SIP (UDP, TCP, TLS), H323, UA-NOE, SRTP, SCCP
Support for terminals SIP, UA-NOE, H323, SCCP
Survival services: calls, hold, transfers

SDWAN networks
Overlay over hybrid networks with App-aware routing, QoS and Visibility
Central SD-WAN flow control including Zero Touch Provisioning
Applications Service Chaining

CARACTERíSTICA TéCNICAS ADICIONALES

Console interface
RJ45 connector with proprietary pinouts (including adapter)
Type RS232, N81
Default speed 9600 bps, maximum speed 115200 bps

MTBF and maximum power consumption
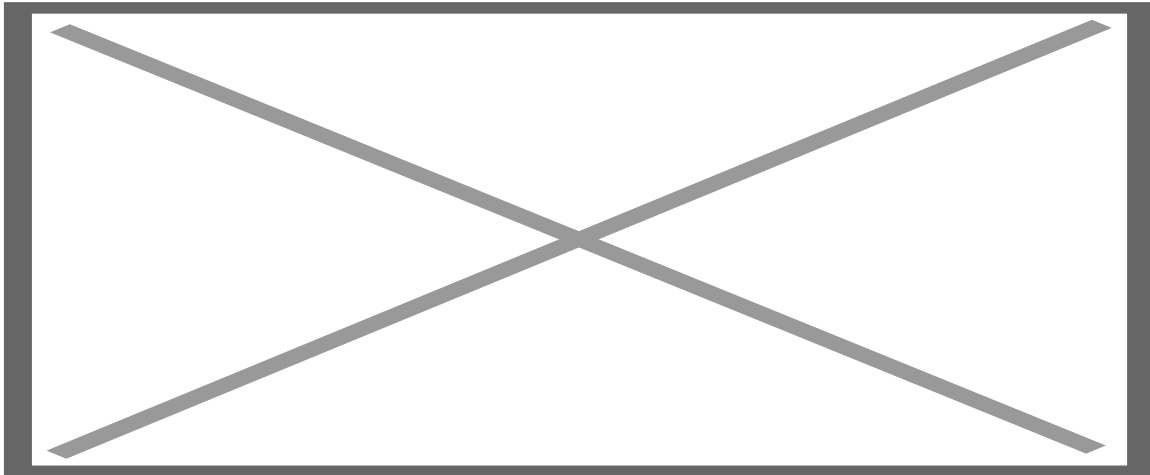MTBF: 584 KHours
Max. Power: 35W without external USB

LEDs
Power supply, slot, USB, status, Wi-Fi-1, Wi-Fi2, switch
GE-SFP, GE-Eth, 3 x mobile, HD/SD, Apps
2 additional LEDs for each Ethernet port (link, speed and activity)

Scenarios