# 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.**

### Highlight

- **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 Advantages

| | |
|---|---|
| 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.

## HARDWARE TECHNICAL FEATURE

### 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

### 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

### 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)

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

### 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

### 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

## SOFTWARE TECHNICAL FEATURE

### 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)

### 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
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)

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

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

### 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

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

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

### 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

### 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

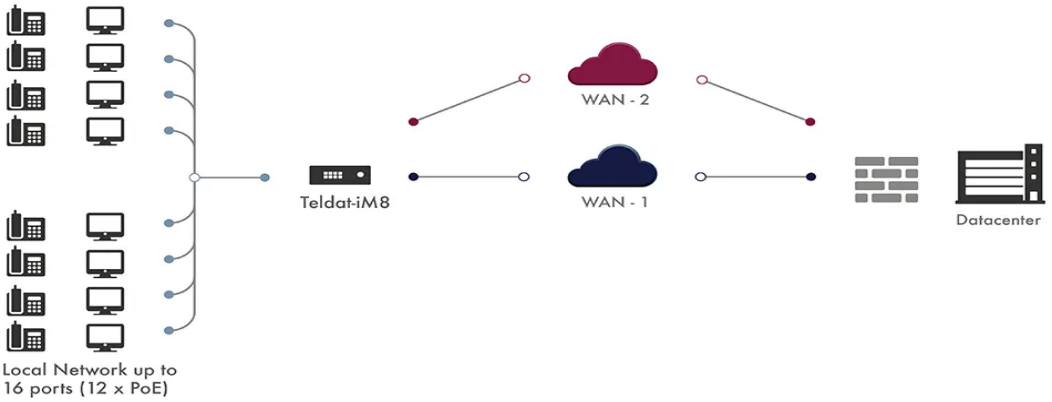
## ADDITIONAL TECHNICAL FEATURE

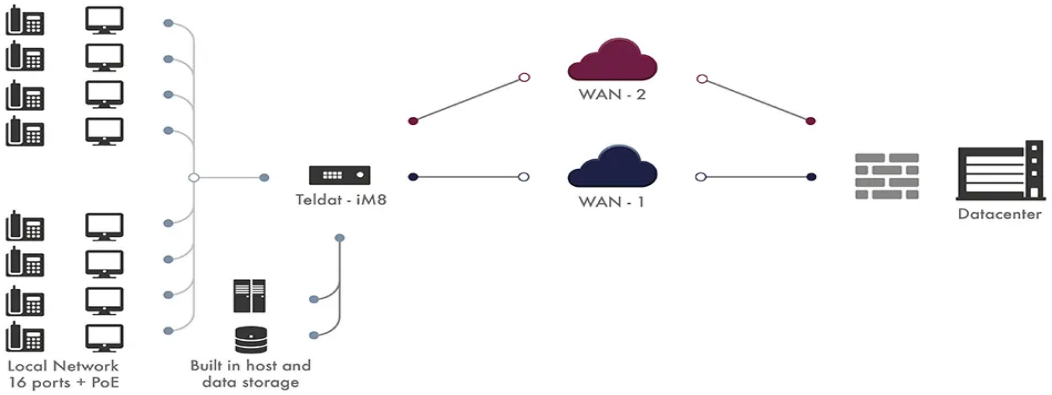
### Console interface
RJ45 connector with proprietary pinouts (including adapter)
Type RS232, N81
Default speed 9600 bps, maximum speed 115200 bps

### 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)

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

## Scenarios






Founded in 1985, Teldat is a Spanish company whose mission is to provide companies with valuable solutions for cloud access, remote office communications, cyberse-curity and voice/data connectivity both in the office and in specific environments whether they are industrial, railway, vehicles or public services.

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