Teldat-5Ge

5G peripheral device for corporate routers

Introduction

5G Mobile connections are an ideal backup infrastructure for fixed WAN services. Unfortunately, however, corporate routers are not usually equipped to handle them, or are installed in poorly accessible locations and hence coverage is poor. Teldat-5Ge is the solution to this problem because it connects the corporate router to mobile networks easily, economically and non-intrusively.

Teldat-5Ge integrates 5G mobile connectivity and can be installed wherever there is adequate network coverage, using Ethernet high speed port to connect to the corporate router.

Destacar

- **Non-intrusive and compatible with other routers**
- **Easy and quick installation**
- **You can place the device anywhere in the office**
- **You only need an Ethernet connection**
- **PoE+ support**
- **Standards-based**
- **No management required**

Interfaces

1 x 5G-NR (Sub-6GHz)	3GPP Release 15 (NSA and SA modes)
1 x 2,5Gb Ethernet LAN (Antenna Mode)	If using PoE+, only LAN cable needed
1 x 2,5Gb Ethernet WAN (Router Mode)	Enabled by an optional license
4 x external antenna connectors	Indoor antennas included

Competitive Advantage

Quick and easy installation	No configuration required, just connect to Ethernet and it´s ready to go. If PoE+ is enabled, you only need the Ethernet cable; if not, you'll need to plug it.
No management required	The device uses auto provisioning to download the configuration (similar to an IP phone) from the office router.
The corporate router maintains control	The router controls the mobile connection, applying the same connection, security and QoS policies used for the fixed connection.
Designed for 5G service providers	The 5Ge, unlike other devices, is capable of meeting all the EN-DC band combinations and DSS requirements that 5G-NSA networks usually need.

Key Features

- **It Integrates 5G access into existing infrastructure** The router that manages the fixed connections also controls the mobile connections and therefore enforces the same security and QoS policies.

- **Automatic provisioning** Teldat-5Ge does not store the configuration but it receives it via DHCP during startup. This means that you do not need to do anything on the device before physically installing it.

- **Installation using a single cable** With Power over Ethernet+ support (a PoE+ injector is available for non-PoE+ switches) it can be powered simply using a single Ethernet cable making installation quick and easy.

- **Specifically designed to be placed inside the office** The device goes unnoticed in work/transit areas thanks to its compact size and elegant design.

- **Standards-based** The setup process implies standard features. A VLAN is used to set up the data connection between the router and the Teldat-5Ge, creating what is, for all intents and purposes, a virtual interface on the router.

- **No management required** The device can be managed from the existing router, so you do not need to reserve an address for managing the device or register it on the management systems.

- **Tabletop to wall installation** Designed to be mounted on a wall to get the best signal strength.

- **Standalone router option** In "router mode" the Teldat-5Ge is a standalone solution that provides copper and 5G WAN connectivity to remote offices.

CARACTERíSTICA TéCNICA DEL HARDWARE

Gigabit connection to the local network
1x 2,5GbE LAN port and 1x 2,5GbE WAN port(Optional)
RJ45 connector

Dimensions and weight
Length x Width x Height: 196.33 x 196.33 x 54.93 mm.
Approximate weight: 0,4kg
Format: Desktop and wall

5G: Sub 6Ghz NSA and SA modes. Mimo 4x4/2x2
NSA TDD: Max 2.5Gbps(DL)/ 650Mbps(UL).SA TDD: Max 2.1Gbps(DL)/
450Mbps (UL)
5G FR1 bands: n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40,
n41, n48, n66, n71, n77, n78, n79

Four external antennas
SMA connector
Dual SIM support

Environmental specifications
Temperature: 0 to 45 ºC
Relative humidity: 5 to 90%
Atmospheric pressure: 700 to 1060 mbars

CARACTERíSTICA TéCNICA DEL SOFTWARE

Auto-provisioning
Parameters received via DHCP
The office router is normally the DHCP server
Install and ready to go

IP protocol(1)*
ARP, ARP Proxy, MTU discovery, NAT, ECMP, BFD
RIP, OSPF, BGP, policy-based static and dynamic routing
Virtual Router Forwarding (Multi-VRF)

Security(1)*
IPSec support in transport and tunnel mode
Pre-shared authentication, RSA, Certificates, MDS, SHA-2
Encryption: DES (56 bits), 3DES (168 bits), AES (128, 192 and 256 bits)

IP services*
DHCP, DNS, FTP, SFTP, SSH, Telnet server and client
NTP, LDAP, Syslog, SCP client. TFTP Server, DHCP Relay , dynDNS
Phone terminal management using with SIP

IPv6*
Dual Stack, IP6oIPv4, IPv4oIPv6, GRE, 6rd, DHCPv6, ICMPv6, SLAAC
Static and dynamic routing RIPng, OSPFv3, MP-BGP
Multicast: MLD, MLDv2, Listener, Querier

Communication with the router
Connection to the router via VLAN
Use of existing Ethernet infrastructure
Manageable from the router

IP protocol (2)*
Multicast: IGMP (v1, v2, v3), PIM-SM, 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 and session-based Firewall
DoS and DDoS detection

Quality of service*
Classification, marking, BW management, BW prioritization and limitation
Up to 32 types 16 queues per interface
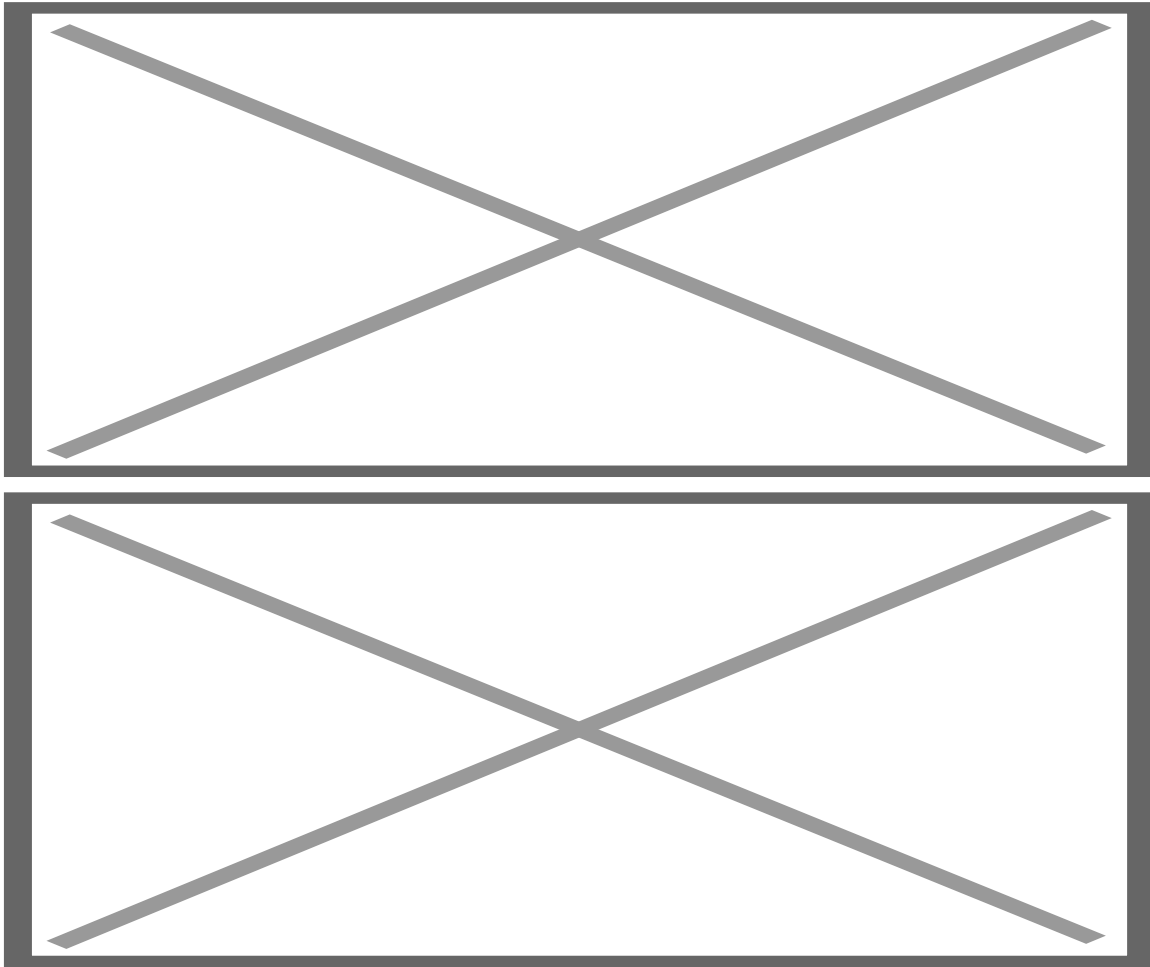Strict policies (PQ), Low latency (LLQ), by weight/type (WFQ, CBWFQ)

Management*
Netflow, RMON V5 and V9, SNMPv1, v2c y v3, Syslog support
Manageable via SMS.Wireshark-compatible remote traffic capture
(*) Features available in router mode only.

CARACTERíSTICA TéCNICAS ADICIONALES

LEDs
PWR: Power/Error, SIM: Active SIM, Cell: Cellular status
Ethernet 1: Link / Traffic LAN1, Ethernet 2: Link / Traffic LAN2

Scenarios

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