Imola

x272-44-IKW-IKF   x272-44-IK2W-IKF

Tiesse
innovazione made in Italy®

IAD Wireless VoIP & EVDSL Router

Wireless VoIP broadband router

Tiesse is an italian leading company focused on innovative network devices, broadband and mobile routers and M2M / IoT enabling appliances. With experiences lasting more than 20 years, Tiesse designs, develops and manufactures all proprietary equipments in its italian location.

All product series (**IMOLA**, **LIPARI** and **LEVANTO**) are innovative, competitive and telco certified.

Tiesse devices are present in the largest distributed networks at national level: from petrol stations to retailers, insurances, banks and financial organizations.

Imola 0272-44-IKW-IKF

Imola 0272-44-IK2W-IKF

Imola 5272-44-IKW-IKF

Imola 5272-44-IK2W-IKF

Imola x272-44-IKxW-IKF

It is an innovative series of highly innovative routers / IAD for voice and data ultrabroadband and fiber networks.

Imola x272-44-IKxW-IKF integrates 4 FXS ports, 4 BRI ports and 1 FXO port.

1 fiber port (SFP cage) for GPON and Wi-Fi dual band connectivity completes the standard equipment.

Imola x272-44-IKxW-IKF supports VDSL enhanced profile (35b vPlus) and allows to make simultaneously up to eight phone calls (fax and voice) on IP network.

It offers advanced QoS (Quality of Service), security and routing features.

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Models

Imola	0272-44-IKW-IKF	5272-44-IKW-IKF	0272-44-IK2W-IKF	5272-44-IK2W-IKF
1 x RJ45 console port	•	•	•	•
1 x WLAN 802.11 b/g/n port	•	•	•	•
1 x WLAN 802.11 a/c port			•	•
10/100/1000 Mb Switch Ethernet port	4	4	4	4
eth0 WAN port	1	1	1	1
Adsl 2/2+ / EVDSL	•	•	•	•
Phone line	4 x FXS - 1 x FXO 2 x BRI NT/TE 2 x BRI NT	4 x FXS - 1 x FXO 2 x BRI NT/TE 2 x BRI NT	4 x FXS - 1 x FXO 2 x BRI NT/TE 2 x BRI NT	4 x FXS - 1 x FXO 2 x BRI NT/TE 2 x BRI NT
Fiber SFP port (cage)	•	•	•	•
4G		•		•
USB 3.0	•	•	•	•

Interfaces

LAN	GE	5 x 10/100/1000 Mbps RJ-45 auto sensing ports
	Wi-Fi	1 x 802.11 b/g/n port (2.4 GHz) 2x2, 1 x 802.11 a/c (5 GHz) 3x3
WAN	GE-WAN	1 x 10/100/1000 Mbps RJ45 may be used as WAN (the one with label WAN)
	ADSL 2/2+ VDSL2 EVDSL	1 x RJ-11 port, Full rate ADSL 2/2+/VDSL2 **ADSL2/2+** Downstream data rate up to 24 Mbps — Upstream data rate up to 3.5 Mbp Standards-compliant G.992.1 annex A,B,C&I, G.992.2-g.Lite, G.992.3 annex A, B, I, J, M G.992.4-g.Lite.bis, G.992.5 annex A, B, C, I, J, M, ANSI T1.413 issue2, ETSI TS 388 ADSL-over-ISDN, ITU T-I361, ITU T-I.363.5, ITU T-I.432, ITU T-I610, ITU T-I731 **VDSL2** Support for all VDSL2: 8MHz to 30MHz ITU-T G993.2 profiles G.Vector standard-compliant (ITU-T G.993.5) ITU-T G.998.4 G.INP standard-compliant ADSL2 compatible (backward compatibility) **EVDSL2** Supports 35MHz ITU-T G993.2 Annex Q (profili 35b o Vplus) profiles with aggregate rates up to 400Mbps
Fiber	SFP cage	Active and passive fiber (GPON)
Voce	FXS	4 x RJ-11 port
	BRI	2 x BRI NT RJ 45 - 2 x BRI NT/TE RJ 45
	FXO	1 x RJ-11 port
Console		1 x RJ-45 port
USB		USB 3.0

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IAD Wireless VoIP & EVDSL
Router broadband with FXO, FSX, ISDN
BRI integrated voice fetaures .

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Radio mobile port

GSM / GPRS / EDGE	Frequency band: 900 / 1800 / 1900 MHz GPRS multislot 10, EDGE multislot 12
UMTS / HSDPA / HSUPA / HSPA+	Frequency band: 900 / 2100 Mhz HSDPA data rates up to category 20 HSUPA data rates up to category 6
DC-HSPA+	DC-HSPA+ (42 Mbps in DL)
LTE	Frequency band: 800/900/1800/2100/2600 Mhz Data rates (category 3, MIMO)* Peek data rates 100 Mbps DL, 50 Mbps UL (actual throughput dependson network configuration, bandwidth assigned to the UE category, the number of users and RF signal conditions) WCDMA 900/2100 * Variation with category 6 available on request

Imola 5272-44-IKW-IKF

4G Antennas

⇒ Multiple Input / Multiple Output (MIMO) support included

⇒ 2 high gain removable antennas (SMA male)

⇒ Outdoor high gain variation also available (omnidirectional and directional)

Radio mobile transmission power

LTE	Band 1,3,7,8	22dBm
	Band 20	23 dBm
UMTS	Band 1,8	23 dBm
GSM / EDGE	GSM900	32 dBm iGMSK mode 27 dBm 8PSK mode
	DCS1800CS	29 dBm GMSK mode
	PCS1900CS	29 dBm GMSK mode 26 dBm i8PSK mode

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Router broadband with FXO, FSX, ISDN BRI integrated voice fetaures .

Protocols

IP Features	TCP-UDP IPv4, ICMP IPv6 support Lan Bridging VLAN support on LAN interface 802.1q in Access mode, Trunk, native VLAN and Hybrid mode IEEE 802.1d (Spanning Tree Protocol)
Routing & Multicast	Static, Policy routing, RIPv1, RIPv2, BGP-4, BGP-4+, OSPFv2 VRF Lite, Routing redistribution and tagging VRRP (Virtual Routing Redundancy Protocol) with IPv4 - IPv6 authentication IGMP v1 - v2 - v3, IGMP snooping, IGMP proxying Multicast routing with PIMv2 sparse-mode and PIMv2 dense-mode, MSDP
QoS	Traffic classification based upon source IP, based on a combination of source IP, destination IP, protocols UDP, ICMP, TCP, etc., upon DSCP/IP precedence, ToS or Port DiffServ, CoS on VLAN , QoS on ATM class Shaping with guaranteed allocated bandwith and redistribution of bandwith excess Committed Access Rate and Multicast rate Limit Mechanisms of traffic prioritization, ability to define an arbitrary number of priority classes
Security E VPN	NAT/PAT ACLs, Stateful Firewall, IP Filtering SSL Tunnelling, GRE Tunnelling VPN with IPsec, 3 DES Encryption, L2TP, PPTP
Voice	SIP standard compliance: RFC 2327 SDP, RFC 2617 , RFC 3261 SIP, RFC 2833, RFC 2976, RFC 3262, RFC 3264, RFC 3265, RFC 3311, RFC 3323 ,RFC 3325, RFC 3326, RFC 3398, RFC 3578, RFC 3842, RFC 3960, RFC 4566 SIP registration features, SIP UAC, deregistration, GNR registration Codec support and negotation Tones handling OOB DTMF and in-band tone and announcements Call forwarding unconditional both no answer and busy user Call waiting / hold features T.38 fax support Interworking with PBX Voice Fallback on POTS (FXO or BRI) interfaces
Management and Configuration	Full support of SNMP v1, SNMPv2, SNMPv3 Telnet server with multiple simultaneous sessions , SSH server with multiple simultaneous sessions IP SLA support for: One-Way Delay, Round Trip Delay, Jitter, Packet Loss SAA (Service Assurance Agent), TR-69 Fault management Syslog /Trap User authentication PAP / CHAP, Radius Support TACACS+ Wi-Fi with WPA2, Multiple SSID Tracking for backup management, commands and events scheduled Software update via TFTP and FTP Configuration via command Line Interface (CLI), Text/Menu oriented and Telnet, Web configuration interface Possibility to keep an arbitrary number of configuration
Services	DHCP client, DHCP server with antispoofing functions Intelligent DNS Proxy, local and remote Traceroute NTP Client and Server support Easy VPN

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Router broadband with FXO, FSX, ISDN BRI integrated voice fetaures .

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GE · EVDSL · 2.4 GHz · 2.4 GHz 5 GHz · 4G LTE

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Hardware Features

Processor	RISC Network processor
DRAM	256 MB - DDR3
Flash Memory	256 MB
WPS	button
Standard weight	1900 gr ±10%

274 mm

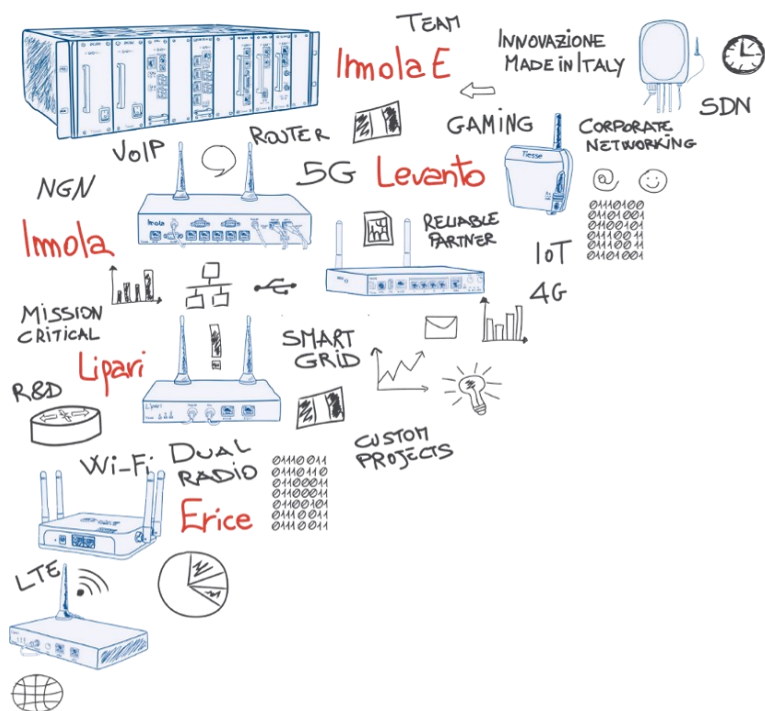197,5 mm

48,8 mm
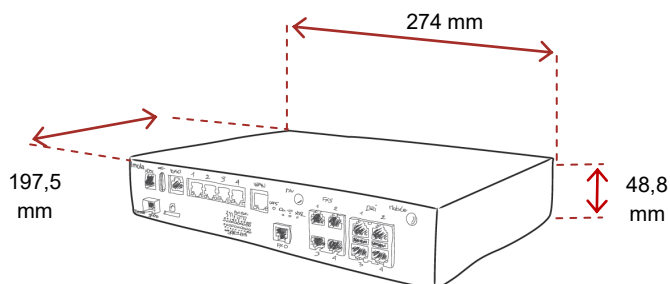
Features

Features	
Power supply voltage	AC/DC (internal Universal 100-240 VAC)
Power consumption	< 40 W (Full configuration)
Operating temperature	-5°C / + 50°
Storage temperature	-40°C / +70°C
Max operating humidity	93% (non condensing)

LED
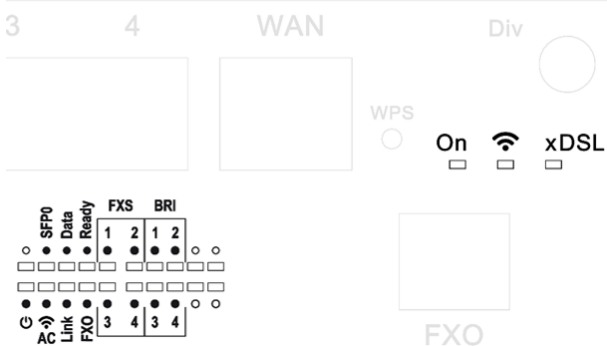
3   4   WAN   Div

WPS   On   xDSL

SFP0 Data Ready   FXS   BRI
                    1 2   1 2

AC Link FXO   3 4   3 4

FXO

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Tiesse may change information at any time without notice.

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