

# Imola LX Router series

# Imola LX 0272-IKW-V



Imola

Imola





Datasheet

# Imola LX 0272-IKW-V



## Router ultrabroadband

### VDSL2 e Wi-Fi

The **Imola LX 0272-IKW-V** series routers are part of the evolution of the IMOLA line, which are certified routers used in the networks of the main telecommunications operators.

Thanks to the ADSL2 / VDSL2 and WAN Giga Ethernet connectivity, they are particularly suitable for business applications where security, service continuity and network performance are of primary importance.

FEATURES	KEY BENEFITS	APPLICATIONS
$\begin{array}{l} \Rightarrow \\ \Rightarrow \\ \end{array} \text{ Switching} \end{array}$	ightarrow Security ightarrow Scalability	⇒ Enterprise WAN network secure access
$\Rightarrow  Multi fail-over$ $\Rightarrow  QoS$	⇒ Easy installation and factory pre-configuration	⇒ Branches and remote offices of Banks and Insurance companies
	$\Rightarrow$ Zero touch provisioning	$\Rightarrow$ Lottery
		$\Rightarrow$ Gaming networks
		$\Rightarrow$ Transport
		$\Rightarrow$ Backup for broadband



Imola LX 0272-IKF routers are integrated into the Tiesse Network Architecture (TNA) suite.

TNA is the modular software suite that enables Zero Touch Provisioning network architecture, including monitoring, remote and automated web-based

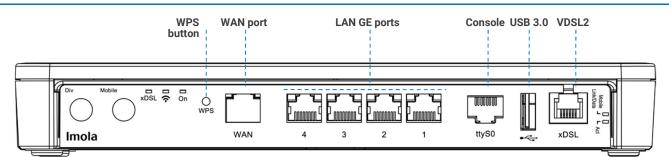
management of configurations and firmware releases of the installed fleet; enables traffic engineering, network overlays, and many other features.

A complete datasheet of the solution is available at www.tiesse.com.



networks

#### INTERFACCE HARDWARE



Port	Description	Details
LAN	— GE	- 4 ports 10/100/1000 Mbps, RJ45 connector
	– Wi-Fi	- 1 port 802.11 b/g/n port (2.4 GHz) 2x2
	— GE	<ul> <li>1 port 10/100/1000 Mbps, RJ-45 connector (label WAN)</li> </ul>
		1 port with RJ11 connector, Full rate ADSL2/2+ / VDSL2
		ADSL2/2+
		<ul> <li>Downstream data rate up to 24 Mbps</li> </ul>
		<ul> <li>Upstream data rate up to 3.5 Mbp</li> </ul>
	– ADSL 2/2+ – VDSL2	<ul> <li>Standards-compliant G.992.1 annex A,B,C&amp;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</li> <li>ADSL-over-ISDN, ITU T-I361, ITU T-I.363.5, ITU T-I.432, ITU T-I610, ITU T-I731</li> </ul>
		VDSL2
		<ul> <li>Support for all VDSL2 profiles: 8 MHz to 30 MHz ITU-T G993.2</li> </ul>
		- G.Vector standard-compliant (ITU-T G.993.5)
		<ul> <li>ITU-T G.998.4 G.INP standard-compliant</li> </ul>
		<ul> <li>ADSL2 compatible (backward compatibility)</li> </ul>
CONSOLE	— RJ45	<ul> <li>1 port with RJ45 connector</li> </ul>
USB		- 1 port USB 3.0

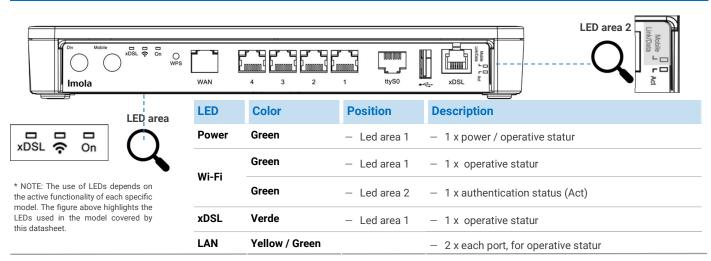
#### **VDSL2** - New Generation network

VDSL

Support of the new generation networks (NGN), ensuring:

- Support for VDSL2 profiles: 8 MHz to 30 MHz ITU-T G993.2
- G.Vector standard conformity (ITU-T G.993.5)
- ITU-T G.998.4 G.INP standard conformity (impulse noise protection)
- ADSL2 compatible (backward compatibility)

#### LEDS DESCRIPTION



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#### SOFTWARE

\* Nota: le funzionalità software dipendono dalla versione e dal livello di aggiornamento del firmware del prodotto.

Area	Caratteristiche principali	
NETWORKING	- TCP-UDP IPv4	– IPv6
LAYER 2 FEATURES	<ul> <li>LAN Bridging</li> <li>VLAN support on LAN interface 802.1q in Access mode, Trunk, native VLAN and Hybrid mode</li> </ul>	<ul> <li>Layer 2 Protocol Tunneling (L2PT)</li> <li>802.1Q-in-802-1Q</li> </ul>
ROUTING & MULTICAST	<ul> <li>Static, Policy routing, RIPv1, RIPv2</li> <li>BGP-4, BGP-4+</li> <li>OSPFv2</li> <li>VRF Lite, Routing redistribution and tagging</li> <li>VRRP (Virtual Routing Redundancy Protocol) with IPv4-IPv6 authentication</li> </ul>	<ul> <li>IGMP v1-v2-v3, IGMP snooping, IGMP proxying</li> <li>Multicast routing with PIMv2 sparse-mode and PIMv2 dense-mode, MSDP</li> <li>IEEE 802.1d (Spanning Tree Protocol)</li> </ul>
QOS	<ul> <li>Traffic classification based upon source IP, based on a combination of source IP, destination IP, protocol (UDP, ICMP, TCP, etc), upon DSCP/IP precedence, ToS or Port</li> <li>DiffServ</li> <li>CoS on VLAN</li> <li>QoS on classi ATM</li> </ul>	<ul> <li>Shaping with guaranteed allocated bandwith and redistribution of bandwith excess</li> <li>Committed Access Rate e Multicast rate Limit</li> <li>Mechanisms of traffic prioritization, ability to define an arbitrary number of priority classes</li> <li>IEEE 802.3ad link aggregation</li> </ul>
SECURITY	<ul> <li>NAT/PAT</li> <li>ACLs, Stateful Firewall</li> <li>SSL Tunnelling</li> <li>L2TP</li> </ul>	<ul> <li>GRE Tunnelling with keep alive and key sequence numbering (radio mobile network optimization)</li> <li>VPN con IPSEC/ESP o IPSEC/AH IKEv1/IKEv2</li> <li>3 DES Encryption</li> </ul>
SERVICES	<ul> <li>DHCP client, DHCP server with antispoofing functions, DHCP Layer Discovery Protocol IEEE 802.1ab, DHCP relay</li> <li>Intelligent DNS Proxy, both local and remote</li> <li>Traceroute</li> </ul>	<ul> <li>NTP Client and Server support</li> <li>Easy VPN</li> <li>DDns</li> </ul>
MANAGEMENT AND CONFIGURATION	<ul> <li>SNMP v1, SNMPv2, SNMPv3</li> <li>Telnet server with multiple simultaneous sessions</li> <li>SSH server with multiple simultaneous sessions (SSHv2)</li> <li>Netflow</li> <li>IP SLA support for: One Way Delay, Round Trip Delay, Jitter, Packet Loss</li> <li>SAA (Service Assurance Agent)</li> <li>Fault management Syslog /Trap</li> </ul>	<ul> <li>Radius Support, TACACS+</li> <li>Tracking for backup management, commands and events scheduled</li> <li>Software update via TFTP, FTP, HTTP, HTTPS, SCP</li> <li>Configuration via command Line Interface (CLI), Text/Menu oriented and Telnet</li> <li>TNA (Tiesse Network Architecture) suite per autoprovisioning e gestione automatizzata remota</li> <li>Possibility to keep an arbitrary number of configuration</li> </ul>

#### ONE ROUTER, THREE POSITIONING OPTIONS



On a horizontal surface, such as your desktop, for example

Vertical positioning, using its bracket



Wall mounting, using the same bracket of the vertical positioning

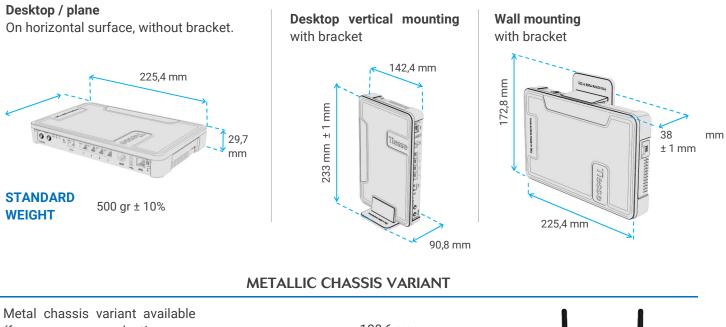
#### SYSTEM FEATURES

POWER	<ul><li>12V AC/DC Adapter</li><li>ON/OFF button</li></ul>
CONSUMPTION	– < 20 W Full Configuration
FANS	– Fanless
PROCESSOR	<ul> <li>RISC Network processor</li> </ul>
MEMORY	<ul> <li>RAM: 256 MB - DDR3</li> <li>FLASH: 256 MB</li> </ul>
ENVIRONMENT	<ul> <li>Operating temperature: -5°C / +50° C</li> <li>Storage temperature: -40°C / +70°C</li> <li>Maximum relative operating humidity: 93% (non-condensing)</li> </ul>

EXTERNAL FEATURES		
MATERIAL	<ul> <li>Plastic chassis</li> </ul>	
COLOR	– Black	
FORM FACTOR	– Desktop	

TERNIAL FEATUREO

SIZE



Metal chassis variant available (for mass production or industrial projects) with extended operating temperature range (-25°/+70°).

#### STANDARD WEIGHT 660 gr ± 30





#### **TECHNICAL SUPPORT**

#### On line support on:



**Supporto.tiesse.com**: portal with technical documentation, installation instructions, software updates, and ways to request technical support.

Wiki.tiesse.com: site dedicated to software documentation; includes user manuals, first-time user guides, case studies, tutorials, and other useful resources for using the products.





Tiesse is a totally Italian company with more than 25 years of experience in the design, development and production of network equipment and IoT devices, suitable for use in missioncritical and industrial scenarios. Tiesse's most successful series, Imola, Lipari and Levanto, are innovative, competitive and certified, and are present in the networks of the major telecommunications operators, in the energy sector, large-scale distribution and vertical sectors, both in the Italian and foreign markets.

Further information on Tiesse solutions can be found on the company website www.tiesse.com.

