

Elba series











# **Elba 100**











# Managed switch

ELBA series products are managed Ethernet switches, with fixed configuration and they are part of the line of networking solutions entirely designed and produced by Tiesse, a 100% italian company.

#### **FEATURES**

#### 10 ports

Elba 100 has 10 ports: eight Gigabit Ethernet ports and two SFP+ ports, supporting speeds up to 10 Gigabit.

#### **Easy to configure**

Elba 100 is easy to configure and thus the set-up time within the network is reduced.

#### **KEY BENEFITS**

- ⇒ Security
- Fiber ports up to 10Gb (SFP+)
- ⇒ Easy installation and factory pre-configuration
- Compact in size
- $\Rightarrow$  Low power consumption

#### **APPLICATIONS**

Elba 100 is particularly suitable for business scenarios

- Security
- Network performances are of primary importance.

#### **Zero Touch Provisioning**

Elba 100 switches are integrated into the Tiesse Network Architecture (TNA) suite.

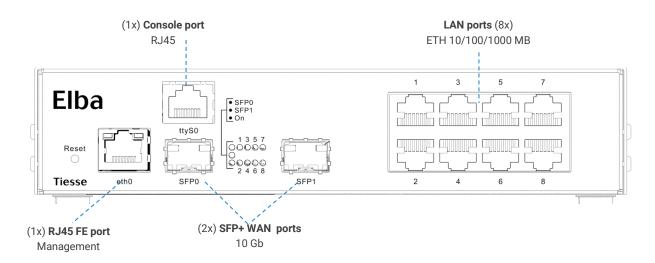
TNA is the modular software suite that enables Zero Touch Provisioning network architecture, including monitoring, remote and automated web-based management of configurations and firmware releases of the installed fleet; enables traffic engineering, network overlays, and many other features.

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

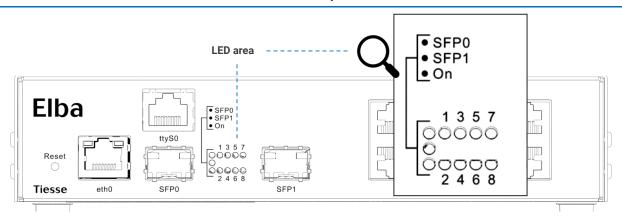




#### **HARDWARE** interfaces



#### **LED** description



| LED   | Color          | Description  |
|-------|----------------|--|
| Power | Green          | - 1 x power / operative status                                       |
| SFP   | Green          | <ul> <li>1 x for each SFP port, it shows operative status</li> </ul> |
| LAN   | Yellow / Green | 1 x for each ETH port, it shows operative status                     |

### **ADD-ONs**

Tiesse products offer a range of optional accessories, available according to the specifications of each model; these include omnidirectional and directional antennas for outdoor use, mounts for various mounting options, and SFP transceiver modules.

Complete documentation on supported accessories can be downloaded directly from www.tiesse.com.



### **Technical support**

Online support on:



**Supporto.tiesse.com**: portal with technical documentation, assembly 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 resources useful in using the products.





# **SOFTWARE**

| •                  |  |  |  |
|--------------------|--|--|--|
| Area               | Main features*   |  |  |
|                    | <ul> <li>Spanning tree protocol</li> <li>Support of Spanning Tree Protocol 802.1d standard</li> <li>RSTP (Rapid Spanning Tree Protocol), MSTP Multiple Spanning Tree Protocol</li> </ul> |  |  |
|                    | <ul> <li>LLDP - Support of Link Layer Discovery Protocol IEEE 802.1ab</li> </ul>   |  |  |
|                    | - VLAN   |  |  |
| Switching Layer 2  | VLAN tag 802.1Q, VLAN based on MAC address   |  |  |
|                    | <ul> <li>VLAN for management, VLAN Q-in-Q</li> <li>VLAN for voice traffic (assignment to a specific VLAN with QoS management)</li> </ul>   |  |  |
|                    | - VEAN for voice traine (assignment to a specific VEAN with Qos management)  |  |  |
|                    | <ul> <li>Port aggregation - Support of LACP (Link Aggregation Control Protocol) IEEE 802.3ad</li> </ul>  |  |  |
|                    | <ul> <li>Unidirectional Link Detection - Support of UDLD</li> </ul>  |  |  |
|                    | <ul> <li>IGMP - Support of Internet Group Management Protocol to limit multicast traffic</li> </ul>  |  |  |
|                    | - Class of Service (CoS)   |  |  |
|                    | <ul> <li>Classification based on port, over VLAN prioritiy VLAN (802.1p tag),</li> </ul>   |  |  |
|                    | Differentiated Services (DiffServ)   |  |  |
|                    | <ul> <li>Remarking COS</li> </ul>  |  |  |
| QoS                | <ul> <li>WRR - Support Weighted Round Robin</li> </ul>   |  |  |
| Quality of Service | <ul> <li>Levels - 8 hardware queues for each priority level</li> </ul>   |  |  |
|                    | - Traffic/speed  |  |  |
|                    | Data flow control and restriction based on VLAN and port   |  |  |
|                    | <ul> <li>Storm control</li> </ul>  |  |  |
| Administration and | - CLI - Command line   |  |  |
| Management         | <ul> <li>Additional services - TNA autoprovisioning and monitoring</li> </ul>  |  |  |
|                    | * Note: Software features depend on both version and update level of the firmware  |  |  |
|                    |  |  |  |

# **SYSTEM features**

| POWER       | <ul><li>External Desktop 12 V (internal Vdc 2.5 A)</li><li>Power switch ON/OFF</li></ul>  | EXTERNAL features                       |  |  |
|-------------|---|---|--|--|
| FORM FACTOR | - Desktop   | MATERIAL – Metal chassis                |  |  |
| FANS        | - Fanless   | COLOR – black                           |  |  |
| ENVIRONMENT | <ul> <li>Operating temperature: -5°C / +55° C</li> <li>Storage temperature: -40°C / +70°C</li> <li>Max relative operating humidity: 93% (non condensing)</li> </ul>               | SIZE  195 mm                            |  |  |
| RESET       | Reset and restore factory functions   | 140 mm                                  |  |  |
| CONSUMPTION | - < 20 W Full Configuration   | Elba 42,1                               |  |  |
| PROCESSOR   | - ARM Cortex-A7 500 MHz   | mm (d)                                  |  |  |
| ADD-ONS     | <ul> <li>Please, refer to the add-ons datasheets for all<br/>supported SFP accessories and modules, depending<br/>on the product series. Download it at www.tiesse.com</li> </ul> | 100 100 100 100 100 100 100 100 100 100 |  |  |





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 mission-critical 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.



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