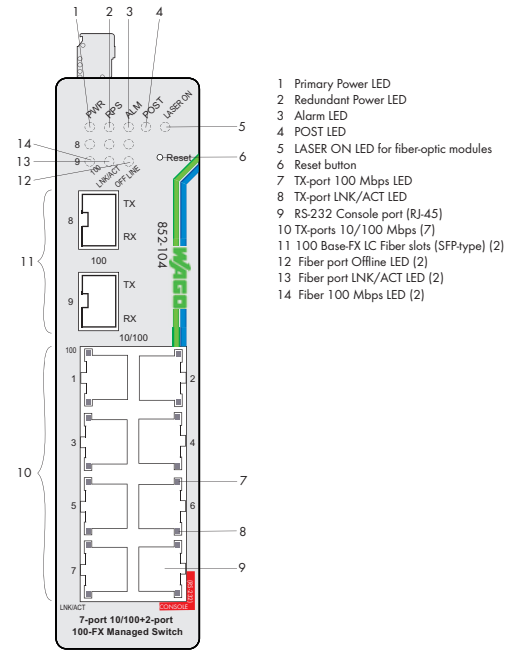




The 852-104 Industrial Switch is a 7-port 10/100Base-TX with dual SFP 100Base-FX port (SFP modules are optional) configurable ETHERNET switch. The switch has a rugged housing, a redundant power supply and function monitoring with relay. These functions along with extensive ETHERNET switch options make it ideal for a wide range of applications.

#### Features:

- Web-based/SNMP management
- Redundant DC power supply
- Large supply voltage range: 9 V ... 48 V

- DIP switch to enable alarm functions
- Full compliance with IEEE802.3, 802.3u, 802.3x, 802.1d, 802.1q, 802.1p standards
- Xpress Ring (redundant ring recovery < 50 ms)
- Non-blocking, store-and-forward switching
- Auto-negotiation on all 10/100Base-TX ports
- Auto-MDI/MDIX (crossover) on all 10/100Base-TX ports
- VLAN (802.1q) VID
- IGMP Snooping for multicast filtering
- Port configuration, status, statistics
- Port Trunking
- SNMP v1/v2 and RMON

| Description                                        | Item No.        | Pack. Unit |
|----------------------------------------------------|-----------------|------------|
| 7/2-Port 100BASE-TX/FX Industrial Managed Switch   | 852-104         | 1          |
| 7/2-Port 100BASE-TX/FX Industrial Managed Switch T | 852-104/040-000 | 1          |
| (Operating temperature -40 °C ... +70 °C)          |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |
|                                                    |                 |            |

| Technical Data                          |                                                                                                                                                                                                                   |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ports                                   | 7 x 10/100Base-TX (RJ-45);<br>2 x SFP 100Base-FX Fiber;<br>1 x RS-232 (RJ-45)                                                                                                                                     |
| Standards                               | IEEE 802.3u 100Base-TX/FX;<br>IEEE 802.3ad Port Trunking;<br>IEEE 802.3 10Base-T;<br>IEEE 802.1d Spanning Tree Protocol;<br>IEEE 802.3x Flow Control;<br>IEEE 802.1p Priority Queues;<br>IEEE 802.1q VLAN Tagging |
| MAC table                               | Up to 2K addresses                                                                                                                                                                                                |
| VLANs                                   | Port-based and Tag-based (64VIDs)                                                                                                                                                                                 |
| Throughputs                             | 14,880/148,800 packets per second (pps) to 10/100 Mbps ports                                                                                                                                                      |
| Wavelength (optical fibers)             | depend on SFP module                                                                                                                                                                                              |
| Maximum length                          | 10/100Base-TX: 100 m;<br>Fiber optic: up to 30 km;<br>RS-232: 15 m                                                                                                                                                |
| Supply voltage                          | 9 V ... 48 V DC (line length < 3 m)                                                                                                                                                                               |
| Energy consumption max.                 | 10.08 W                                                                                                                                                                                                           |
| Energy consumption typ. (24 V)          | 8.4 W                                                                                                                                                                                                             |
| Operating temperature                   | 0 °C ... +60 °C                                                                                                                                                                                                   |
| Storage temperature                     | -20 °C ... +80 °C                                                                                                                                                                                                 |
| Relative air humidity (no condensation) | 95 %                                                                                                                                                                                                              |
| Dimensions (mm) W x H x L               | 50 x 162 x 120                                                                                                                                                                                                    |
| Weight                                  | 1050 g                                                                                                                                                                                                            |
| Vibration resistance                    | acc. to IEC 60068-2-6                                                                                                                                                                                             |
| Shock resistance                        | acc. to IEC 60068-2-27                                                                                                                                                                                            |
| Degree of protection                    | IP30                                                                                                                                                                                                              |
| EMC CE-Immunity to interference         | acc. to EN 61000-6-2 (2005)                                                                                                                                                                                       |
| EMC CE-Emission to interference         | acc. to EN 61000-6-4 (2007)                                                                                                                                                                                       |