

# RTDI-400 SERIES

## 4G-LTE SECURED ROUTER WITH MODEM AND DIAL-UP INTERFACE



**4G / LTE**  
Ethernet Wi-Fi

**POTS  
MODEM**

**GEOLOCATION**  
GPS Galileo

**SECURED**  
VPN Firewall

**RUGGEDIZED**  
Extended temperature  
High EMI

### Description

**RTDI-400 4G/LTE Router** is a highly reliable and secure wireless communication gateway designed for industrial networking. It supports multiband connectivity including GSM, WCDMA and **LTE FDD** for a wide range of applications and vertical machine-to-machine (M2M) and Internet of Things (IoT) markets.

**RTDI-400** is especially aimed at serving the migration of Plain Old Telephone Systems and long lasting voice frequency modem communications. **RTDI-410** embeds a **FXS interface and a multimode V21-V34 modem** that emulate the Public Switched Telephone network over 4G/LTE.

**RTDI-400** delivers flexible connectivity to multiple applications over **Ethernet, serial port, FXS - modem, Wi-Fi and digital inputs and outputs**. It provides **geolocation** from the GPS and Galileo positioning systems.

Built for secure and uninterrupted operation in harsh environments, **RTDI-400** supports extended operating temperature from -20 to 70°C and a flexible input voltage range of 12-24V DC. **CXR RTDI-400** series is an ideal cellular communications solution for mission critical networks.

### Applications

**RTDI-400** is an ideal 4G-LTE Mobile Network gateway to the following networking requirements :

- Electricity, Water, Oil and Gas Utility substations : thanks to its embedded POTS interface and modem to connect long lasting systems (RTU etc.) from their Modem, Serial and Ethernet communication interfaces through the IP and 4G-LTE Cellular networks
- Transport and Smart City infrastructures : thanks to its versatile interfaces to traffic controller, message display, gate control, traffic counters, etc.
- Security sensitive networks : thanks to its security features - VPN, ACL, firewall, 802.1X authentication, Radius and TACACS authentications,
- Wi-Fi access : thanks to its embedded Wi-Fi Access Point

## Specifications

4G/LTE Network	
<b>Standards</b>	<ul style="list-style-type: none"> <li>LTE FDD: B1/B3/B5/B7/B8/B20</li> <li>WCDMA: B1/B5/B8</li> <li>GSM: 850/900/1800/1900 MHz</li> </ul>
<b>Physical</b>	<ul style="list-style-type: none"> <li>1 or 2x SIM cards</li> <li>2x SMA connectors</li> </ul>
Ethernet Interfaces	
<b>RTDI-41x</b>	<ul style="list-style-type: none"> <li>1x WAN 10/100BaseT</li> <li>1x LAN 10/100 BaseT</li> </ul>
<b>RTDI-44x</b>	<ul style="list-style-type: none"> <li>1x WAN 10/100BaseT</li> <li>3x LAN 10/100 BaseT</li> </ul>
<b>RTDI-45x</b>	<ul style="list-style-type: none"> <li>1x WAN Combo RJ45/SFP GE</li> <li>4x LAN 10/100 BaseT</li> </ul>
PSTN modem	
<b>PSTN Interface</b>	<ul style="list-style-type: none"> <li>FXS, 600 Ohms</li> </ul>
<b>Modem</b>	<ul style="list-style-type: none"> <li>V21, V22, V22Bis, V23, V32, V32Bis, V34</li> <li>V42, V42Bis, NMP4-5</li> </ul>
Protocoles	
<b>Routing</b>	<ul style="list-style-type: none"> <li>IP v4, IP v6, dual stack</li> <li>Static and RIP v1/2</li> <li>NAT</li> </ul>
<b>VPN</b>	<ul style="list-style-type: none"> <li>OpenVPN</li> <li>IPSec</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>Firewall</li> <li>ACL, Filtrage MAC et IP</li> <li>DMZ</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>DNS</li> <li>DynDNS</li> <li>SNTP</li> <li>QoS</li> <li>DHCP Server, Client, Relay</li> <li>UPnP</li> <li>SMS</li> <li>Alarm</li> </ul>
General Characteristics	
<b>Format</b>	<ul style="list-style-type: none"> <li>RTDI-440 : compact metallic enclosure</li> <li>RTDI-420 : compact plastic enclosure</li> <li>IP-40 protection</li> <li>DIN rail mounting</li> <li>19" kit (option)</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>110 x 100 x 60 mm</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>0.7 kg</li> </ul>
<b>Operating temp.</b>	<ul style="list-style-type: none"> <li>-20 °C to +70 °C</li> </ul>
<b>Hygrometry</b>	<ul style="list-style-type: none"> <li>10 to 95% HR</li> </ul>
<b>Power supply</b>	<ul style="list-style-type: none"> <li>12-24 Vdc</li> <li>7 W max</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>EN-61000-6-2, EN-61000-6-4</li> <li>EN-60950</li> </ul>
Other Interfaces	
<b>Serial Communication</b>	<ul style="list-style-type: none"> <li>1x or 2x RS232 / RS485</li> <li>Async to UDP / TCP conversion</li> </ul>
<b>Other interfaces</b>	<ul style="list-style-type: none"> <li>1x SMA: GNSS - GPS, Galileo</li> <li>2x digital inputs</li> <li>1x relay output</li> </ul>
Administration	
<b>Protocols</b>	<ul style="list-style-type: none"> <li>http, https, ssh, snmp v3, syslog</li> </ul>
<b>Management</b>	<ul style="list-style-type: none"> <li>Web interface</li> <li>2x firmware memory banks</li> <li>NTP</li> </ul>
<b>Light indicators</b>	<ul style="list-style-type: none"> <li>System</li> <li>VPN</li> <li>Ethernet Link &amp; Activity</li> </ul>
<b>Local interface</b>	<ul style="list-style-type: none"> <li>1x USB Host &amp; Device</li> </ul>

## Product References

Reference	4G-LTE	GNSS	Combo SFP/GE	Ethernet	FXS	SIM	Wi-Fi	RS232/485	Enclosure
RTDI-411	1	-	-	2	-	1	-	1	ABS
RTDI-412	1	1	-	2	1	1	-	1	ABS
RTDI-441	1	1	1	3	-	1	-	2	Metallic
RTDI-445	1	1	1	3	1	1	-	2	Metallic
RTDI-451	1	1	1	4	-	2	1	2	Metallic
RTDI-455	1	1	1	4	1	2	-	2	Metallic



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