RICI Gateway

TDM to IP Solution

Features

- **Fully User Configurable**
- **FTI/FENS Compatible**
- **CMHP Certified**
- **Each module features 4 rear serial ports**
- **1U rack mountable**
- **Redundant configurations available**

The RICI Gateway was specifically designed to address the needs associated with the elimination of leased TDM lines, which traditionally are used for transporting serial data. As such, the product comes equipped with a suite of built-in user configurable options that allow the users to configure the unit for their required needs depending on where they are in the migration path relative to the elimination of leased TDM lines, or, as commonly referred to Sun Setting on TDM.

Interfaces:

The RICI Gateway is intended to interface to a number of different devices such as NAV Aid Devices (VOR, RVR, ALS…), Weather Sensors (ASOS/AWOS), and Radar Flight Data Equipment. The RICI Gateway supports up to 4 serial ports.

Additionally, the RICI Gateway has been designed to provide a CMHP RMLS connection that provides monitoring of the RICI Gateway hardware, and individual channel configuration and status.

Configurations:

The RICI Gateway offers the following user configurable options for converting:

SAI (Async) ⟷ CMHP, SWIM, ActiveMQ

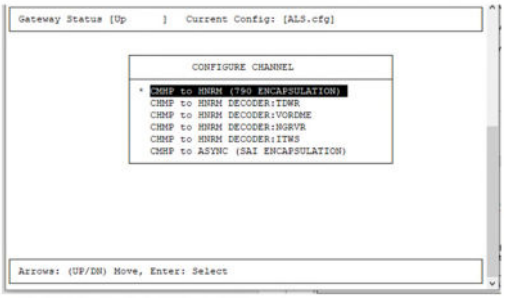
790 (HDLC) ⟷ CMHP, SWIM, ActiveMQ

All of the options listed can also be configured to be transported over the FAA FTI network. By offering the above flexible configuration, as well as both serial and IP connectivity, the RICI Gateway allows the user to switch over gradually or immediately depending on where they are in the migration phase.

Software:

The software running on the RICI Gateway is a SureLine® Core application that provides user access for operation control and maintenance. Access to the unit is provided by a Web UI (web browser's GUI), a console port or network connection to STUI (Sunhillo Terminal User Interface), and SNMP. The CMHP Gatelink is a text-based curses application used to configure and control the RICI Gateway network and serial port connections.

RICI Gateway Configuration



Part Numbers

Part Number:	Description:
010-18-GTW-S01	RICI Gateway, 4 Port Version
010-U-RMS	Rack Mounting Sleeve Kit
33070025	Null Modem Adapter, DB25 F/F

Technical Specifications

Serial Port Controls

- RS-232 (V.28), RS-422, X.21 (V.1 1), V35 (V.35 & V.28), EIA-530A (V.10 & V.1 1), RS-449/V.36 (V.10 & V.1 1), RS-485

Ethernet

- 10BASE-T, 100BASE-T, 1000BASE-T, IEEE-802.3

Protocols/Decoders

- CMHP, SAI (Async), 790 (HDLC), ActiveMQ, SWIM (future capability), ASWONGWY , ASYNC BRIDGE, HNRM Bridge. **Additionally**, the following 790 to SAI decoders are supported: TDWR, VORDME, RVR NEXTGEN, ITWS, ALS, MKRMSC, MKLOC, MKGS, MKIM, ALSF-2/SSALR, NON FED AWOS

Message Proxys

- DME (Selex), BD40 (Modbus ASCII), UXTM (Modbus TCP), UXTM (Modbus RS485), NS710 (Modbus TCP), VOR (Gen 2)

Clock Sources

- DCE, DTE, Split Clock (individual clock receive and transmit on each port)

Power

- Power usage: 17.2W Max per unit
- 100-230 VAC, 50-60Hz, 0.7-0.5A

Dimensions

- Height: 1.61in / 41mm (Standard 1U)
- Width: 7.31in / 185.68mm
- Depth: 9.17in / 233mm

MTBF

- 1,306,558 hours at 30°C, per Telcordia SR-322 (Issue 3)

Environmental (Tested to MIL-STD-810G)

- Storage Temperature: -50°C to +60°C
- Operating Temperature: 0°C to +50°C
- Operating Relative Humidity Range: 10-95%, noncondensing
- Operating Altitude: -300 ft to 10,000 ft

Certifications and Compliance

- CE & UKCA Mark
- RoHS3 Directive (EU) 2015/863
- REACH
- FCC Part 15, Class B
- UL/CSA/IEC/EN 62368-1
- ETL for Canada and US, 3023031
- FAA-G-2100J: Power