TDM to IP Solution

Features

→ **Fully User Configurable**

→ **FTI/FENS Compatible**

→ **CMHP Certified**

→ **Each module features 16 rear serial ports**

→ **Dual rear panel Gigabit Ethernet ports**

→ **1U rack mountable**

The Ventnor Concentrator 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 Ventnor Concentrator 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 Ventnor Concentrator supports up to 16 serial ports and is designed for higher port requirements and/or concentrating these inputs prior to transport over IP.

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

Configurations:

The Ventnor Concentrator 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 Ventnor Concentrator allows the user to switch over gradually or immediately depending on where they are in the migration phase.

Software:

The software running on the Ventnor Concentrator 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 Ventnor Concentrator network and serial port connections.

Ventnor Concentrator Configuration

```
Gateway Status [Up      ]   Current Config: []
```

```
              CONFIGURE CHANNEL

 *  CMHP to HNRM (790 ENCAPSULATION)
    CHMP to HNRM DECODER:TDWR
    CHMP to HNRM DECODER:VORDME
    CHMP to HNRM DECODER:NGRVR
    CHMP to HNRM DECODER:ITWS
    CHMP to HNRM DECODER:ALSF-2/SSALR
```

Part Numbers

Part Number:	Description:
070-16-GTW-S04	Ventnor Concentrator, 16-port, Dual Power Supply
070-U-PS150	Ventnor, 150W Power Supply Module
PT-ACC334-11953	4 x RS232 Hydra Cable w/Pin 7 Gnd, DTE with jackscrews
PT-ACC334-11919	4 x RS232 Hydra Cable, DTE with jackscrews
PT-ACC334-12274	4 x RS232 Hydra Cable, DTE with thumbscrews
PT-ACC334-11969	4 x EIA530 Hydra Cable, DTE with jackscrews
PT-ACC334-12273	4 x EIA530 Hydra Cable, DTE with thumbscrews
PT-ACC334-11921	4 x RS449 Hydra Cable (Pin), DTE with jackscrews
070-U-CONS	Ventnor, Console Cable 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: 35W Max per unit• 100-240 VAC, 2-4A Max, 50-60Hz

Dimensions

➜ Height: 1.61in / 41mm (Standard 1U)
➜ Width: 19in / 482mm
➜ Depth: 11.25in / 285.75mm

MTBF

➜ 366,110 hours at 30°C

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

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Sunhillo is an ISO 9001:2015 and ISO 27001:2013 certified company

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