

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.

FIPS 140-3 Inside - certificate #5003 The Ventnor Concentrator uses Sunhillo's FIPS 140-3 certified cryptographic module to provide validated cryptography for the protection of sensitive information where encryption is used (i.e., https, ssh).

Ventnor Concentrator Protocols/Decoders

General Protocols	790 to SAI Protocols	790 to SAI Decoder Support
CMHP	TDWR	ASWON HNRM to CMHP (ADAS) support of SSM38 delay
SAI (Async)	VORDME	HNRM to CMHP (ADAS) support of SSM38 delay
790 (HDLC)	RVR NEXTGEN	EIDS-DASI to CMHP
ActiveMQ	ITWS	EIDS-ACEIDS - ASOS to CMHP
SWIM (future capability)	ALS	EIDS-ACEIDS - AWOS to CMHP
ASWONGWY	NON FED AWOS	EIDS-IDS-4 to CMHP
ASYNC BRIDGE	MKRMSC	EIDS-RBDT to CMHP
HNRM Bridge	MKLOC	EIDS-SAWS to CMHP
EIDS-Time Source	MKGS	EIDS-SWSWME to CMHP
	MKIM	ASYNC to CMHP - Server
	ALSF-2/SSALR	ASYNC to CMHP - Client

Part Numbers

Part Number

- 070-16-GTW-S04
- 070-U-PS150
- PT-ACC334-11953
- PT-ACC334-11919
- PT-ACC334-12274
- PT-ACC334-11969
- PT-ACC334-12273
- PT-ACC334-11921
- 070-U-CONS
- 33070025

Definition

- Ventnor Concentrator, 16-Port, Dual Power Supply
- Ventnor, 150W Power Supply Module
- 4x RS232 Hydra Cable w/Pin 7 Gnd, DTE with jackscrews
- 4x RS232 Hydra Cable, DTE with jackscrews
- 4x RS232 Hydra Cable, DTE with thumbscrews
- 4x EIA530 Hydra Cable, DTE with jackscrews
- 4x EIA530 Hydra Cable, DTE with thumbscrews
- 4x RS449 Hydra Cable (Pin), DTE with jackscrews
- Ventnor, Console Cable Kit
- Null Modem Adapter, DB25 F/F

Technical Specifications

Ventnor Concentrator Model

- 6000

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)

Ethernet

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

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, 50-60Hz, 4-2A Max
- 1U Modular AC Power Supply
- Hot-swappable redundant configuration

Dimensions

- Height: 1.61in / 41mm (Standard 1U)
- Width: 19in / 482mm
- Depth: 11.25in / 285.75mm
- Weight: 9.0lbs/4.08kg

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%, non-condensing
- 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
- FIPS 140-3 Level 1 ([Certificate #5003](#))

Ventnor Concentrator Configuration:

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Gateway Status [Up]      Current Config: [ASY2CMHP_C1-Srv_216.cfg]

CHANNEL CONFIGURATION
01 [A]:[ASY2CMHP] :ASYNC2CMHP Client
02 [A]:[ CMHP2HNRM] :CMHP_LINK_02
03 [A]:[ HNRMRIDGE] :HNRMRIDGE_03
04 [A]:[ CMHP2HNRM] :CMHP_LINK_04
[ ] RETURN TO MAIN MENU

Arrows: (UP/DN) Move, Enter: Select
    
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