

Introducing the VE3STP-10 Winlink Gateway

A new digital emergency communications node for the Ottawa Valley

What Is Winlink?

Winlink is a worldwide radio email network operated entirely by licensed amateur and military auxiliary operators.

Founded in 1997, the system now handles millions of messages annually, linking radio stations to the global internet — **even when terrestrial infrastructure is down.**

Key design principle: store-and-forward messaging that works without the internet — resilient by design.

1,400+
Radio Gateways Worldwide

125+
Countries & Territories

Millions
Messages Annually

Winlink in the World — Why It Matters

Global Reach

- Used by maritime vessels, expeditions, and aid workers in remote areas
- Activated after Hurricane Katrina, Maria, Harvey and many other disasters
- Deployed by SATERN (Salvation Army) for welfare traffic worldwide
- Integrated into NATO and U.S. military auxiliary nets
- Active in Antarctica, Arctic expeditions, and oceanic crossings
- Standard tool for ARRL and ARES operations across North America

Why ARES Values Winlink

- No internet required — store-and-forward over RF alone
- ICS-213 general message forms built into the software
- Interoperability: messages reach any email address worldwide
- Supports served agencies (ARES, hospitals, EOCs) with familiar email workflow
- P2P mode works even when gateways are unreachable
- Documented in ARES Field Resources Guide and ARRL EmComm guidelines and is actively used in Canada based on the U.S. success

The Winlink Network: Three Key Components

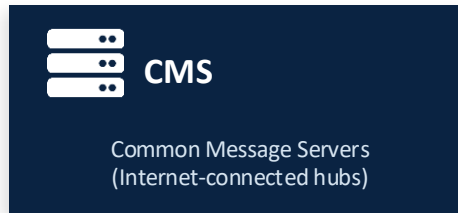


CLIENT STATIONS — Winlink Express (Windows) · Pat Winlink (Linux/macOS/iOS/Android) · RMS Express

Any licensed amateur with compatible software can compose, send, and receive email over RF through any RMS gateway.



← VE3STP-10

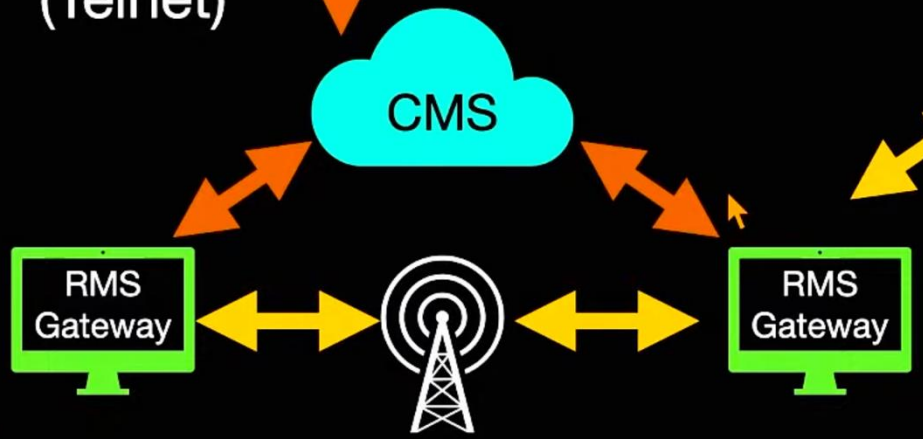


 Winlink
Email



Internet
(Telnet)

Radio
(RF)



VE3STP-10 — Gateway Details



VE3STP-10 · VARA FM / Packet RMS Gateway · Ottawa Valley, ON



Hardware

Beelink Mini S12 (N95) mini-PC · Windows 11 Pro · Yaesu FT-7800
@ 50 W · Signalink Sound card



Software Stack

RMS Packet · UZ7HO Soundmodem · USB audio interface · Runs
24/7/365 rebooting nightly.



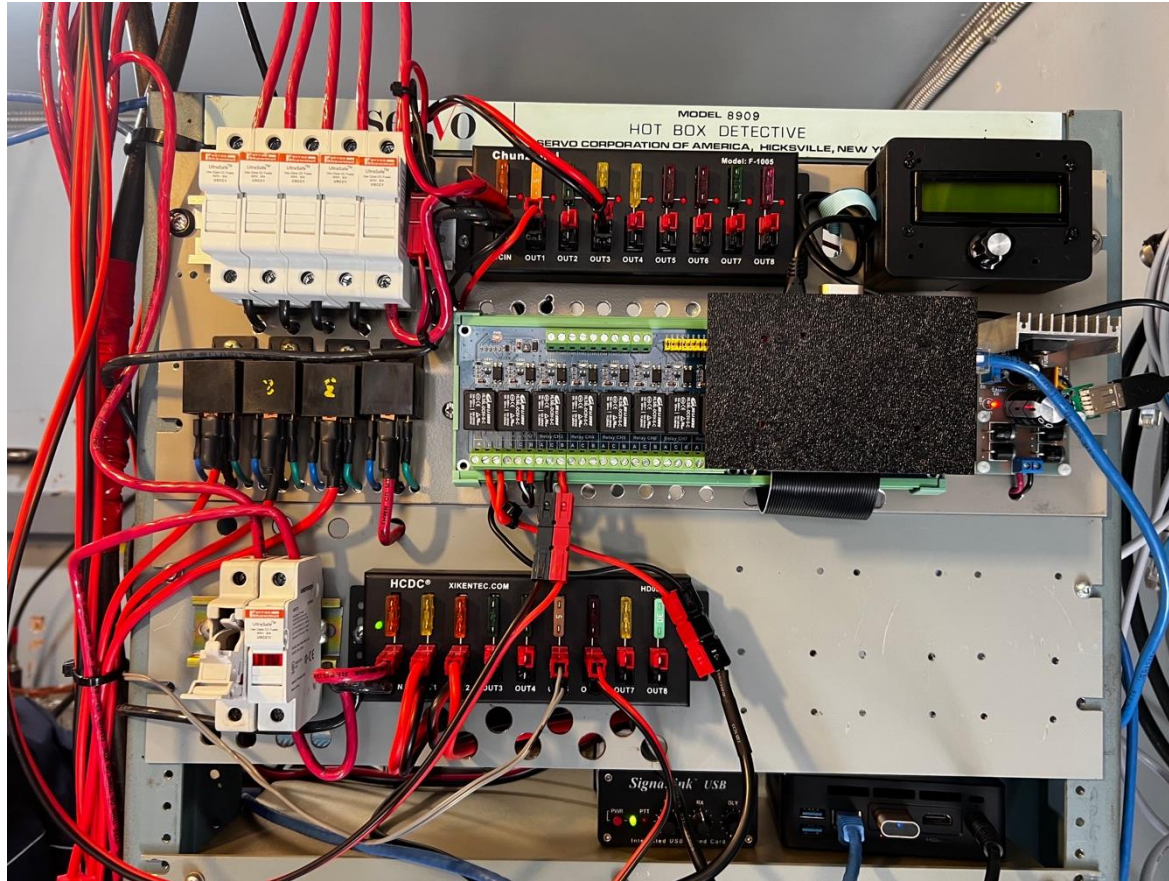
RF Coverage

2 m Co-located with the club repeater site for optimum height and
coverage area across the Ottawa Valley



Access

Open to all licensed amateurs. Unattended operation. Callsign
VE3STP-10 visible in Winlink RMS List and propagation maps





Winlink Operating Modes



Packet (AX.25)

VHF/UHF legacy mode. 1200 or 9600 baud. Widely deployed on 2 m & 70 cm. Excellent coverage in populated areas.



VARA FM

Modern VHF/UHF soundcard mode. Up to ~15 kb/s throughput. Better sensitivity than raw packet — current recommended standard.



VARA HF / ARDOP

HF soundcard modes for long-distance. VARA HF reaches hundreds to thousands of km, ideal when VHF infrastructure is unavailable.



P2P (Peer-to-Peer)

Direct station-to-station transfers without an RMS or internet. Two clients exchange mail over RF alone — maximum resilience.

Accessing VE3STP-10 — Getting Started

1

Install Client Software

Download Winlink Express (Windows) from winlink.org, or Pat Winlink for Linux/macOS/mobile. Free and open-source.

2

Register Your Callsign

Create a Winlink account at winlink.org/user/registration using your callsign.

3

Configure Your Radio

Set your VHF radio to 145.010 MHz (standard Winlink 2 m simplex)

4

Connect & Send

Open a session in your client, select VE3STP-10 as the target gateway, and send/receive. First connection verifies your callsign.

VE3STP-10 is Open for Business

- A new Winlink RMS gateway serving the Ottawa Valley
- Fully unattended, 24/7 — available during training, travel, and real emergencies
- Complements VA3PYC-10 for improved regional redundancy and coverage
- Strengthens ARES and Aux Comm readiness for served agencies and EOC support
- Try it today — your first Winlink session takes less than 15 minutes to set up