CTW E5 EIP Comms Configuration EDS Installation

CONTROL/COMPACTLOGIX COMMS

GMCCUTCHEON NOTES 10/30/2025

EDS (Anybus CompactCom 40 for CTW5)

- This example uses a CompactLogix 1769-L24ER-QBFC1B (v36) and Studio 5000 Logix Designer Mini Edition to show how to connect a CasTemp Wireless E5 with an Anybus M40 EtherNet/IP option module to the PLC.
- The Anybus ABCC CompactCom 40 EtherNet/IP EDS package (B40/M40) '005A002B00370100.eds' for EIP communication.
  - Anybus CompactCom M40 EDS File 005A002B00370100.zip
    - Download the EDS file from the link above.
    - Unzip the file to a convenient location for installation as Studio5000 will need to import this file.

Quick start: Studio 5000 module + EDS install

- CTW E5 EIP Comms Configuration and EDS Installation (Rev 1).
  - Step-by-step: install EDS via the EtherNet/IP Hardware Installation Tool, create the module, set PLC Input = 128 bytes (SINT) and PLC Output = 64 bytes (SINT), and note key tags (e.g., CTWE5:I.Data, ConnectionFaulted).

    - **Note on sizes:** phrased from the **PLC perspective**: **Input = 128 bytes**, **Output = 64 bytes**. (That aligns with CTW5 Output Telegram #10 → PLC Input array.)

Optional: Add-On Instruction (AOI) for Telegram #10

- Parses the 128-byte CTWE5:I.Data into typed tags (datetime, temperature, superheat, TL, PRSH, ROC, battery %, RSSI, error code/list, heat #, group #, module ID) and exposes Valid/NewData/Fault bits. Includes UDTs and a drop-in sample rung.
  - HEN_CTWE5Parser_CLX34_AOI
  - HEN_CTWE5Parser_CLX32_AOI
  - HEN_CTWE5Parser_CLX3x_UserGuide

(Optional) Manual parsing reference (no AOI)

- This document provides a field-by-field reference for CasTemp Wireless E5 Superheat Output Telegram #10: lists each element (e.g., MODID, BAT, DATETIME, TMP, SH, TL, PRSH, ROC, ERR/ERRLIST, RSSI, HN, GN), data types and lengths, byte order (high-byte first for floats/time), plus complete sample frames in ASCII and HEX with total byte counts for PLC parsing..
  - E5_Castemp_Telegram_10

Instrument-side settings (CTW E5)

- Short guide to set EtherNet/IP on the CTW5 (Anybus B40), including Level-2 menu paths, station value, recommended telegram (Output Telegram #10 for the AOI), trigger options, and save steps.
  - CTW_E5_EthernetIP_Config

Quick checklist (PLC perspective)

- ❑ EDS installed (Anybus B40/M40)
- ❑ CTW5 configured for EtherNet/IP, Output Telegram #10
- ❑ Module created in Studio 5000: Input = 128 bytes, Output = 64 bytes (SINT)
- ❑ Connect to probe or Checkmate for data to transfer
- ❑ Confirm ConnectionFaulted stays false during normal operation
- ❑ If using AOI: import L5X (v32 or v34), map CTWE5:I.Data to AOI input, verify Valid/NewData/Fault