Introduction

The FlowLink XT and XT+ enables flow sensing and master valve control for sites that otherwise require expensive hardscape trenching or sites with wire runs over 2,000 feet. FlowLink XT and XT+ provides power and communication between the controller and the flow sensor and master valve over existing valve wire. If a site does not have a spare valve wire, the installer can convert an existing control valve wire using the FlowLink EXT included with the FlowLink XT+ model.

The Controller Transceiver (CT) and Field Transceivers (FXT and EXT) are installed as a unit. Figure 1 below represents a typical installation where the CT is installed adjacent to a WeatherTRAK controller and a Field Transceiver (FXT) is installed adjacent to a flow sensor and master valve up to 4,000 feet away. The optional extension module, EXT, is installed near the converted control valve within 4,000 feet from the CT.

![WeatherTRAK FlowLink XT Typical Installation](image)

**Figure 1**

**Materials Included**

<table>
<thead>
<tr>
<th></th>
<th>CT</th>
<th>FXT</th>
<th>EXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FlowLink XT</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>FlowLink XT+</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend:
- FXT – FlowLink FXT
- EXT – FlowLink EXT
- CT – FlowLink CT
- FS – Flow Sensor
- MV – Master Valve
- WM – Water Meter
- BP – Backflow Preventer
- CV – Converted Valve
Installation

Site Qualification
Site should be qualified before installing FlowLink. Ensure that the included Site Qualification worksheet has been completed before installing FlowLink.

WeatherTRAK FlowLink Installation Preparation
This WeatherTRAK FlowLink installation procedure assumes the following has already been complete:
1. Converted Station or spare field wire indentified  
   Note: a converted station can only have one valve
2. Compatible Flow Sensor and Master Valve installed
3. A pair of field wires (Qty 2 wires) pulled between converted valve wire splice box and Flow Sensor valve box

Installing WeatherTRAK FlowLink Field Transceiver (FXT and EXT)
Installation Procedure

Installation Procedure Overview
1. Connect the installed flow sensor and master valve to the FlowLink FXT
2. Connect the Converted Valve (CV) wires to the FlowLink EXT
3. Mount FlowLink CT near the WeatherTRAK Controller
4. Connect FlowLink CT to WeatherTRAK Controller

Step 1 – Connect Flow Sensor and Master Valve to FlowLink FXT (FlowLink FXT should be installed in flow sensor valve box)
1. Connect FlowLink FXT Red and Black Flow wires to the flow sensor in the flow sensor valve box
2. Connect FlowLink FXT two white MV wires to the Master Valve solenoid wires.
3. Connect FlowLink FXT blue LINE wires to new extended wires
4. Connect Yellow wire to LED input if optical sensor is used; otherwise seal the end of the wire with DBR/Y connector to avoid water damage.

Step 2 – (Only required with FlowLink EXT) Splice FlowLink EXT inline between converted valve and valve field wires
1. Disconnect Converted Station Solenoid Leads from Field Wires
2. Connect original Common and Converted Station Hot field wires to the FlowLink EXT white Station field wires
3. Connect original field wires to Blue Line wires.

Step 3 – Mount FlowLink Controller Transceiver (CT)
Mount the Controller Transceiver (CT) enclosure using the supplied mounting screws adjacent to the existing WeatherTRAK controller.

Wall Mount Enclosure Configurations
- Mount the FlowLink CT up to 3 inches away from the WeatherTRAK Wall Mount Controller aligning the bottom of the two units.
- Install the FlowLink CT wire harness through the supplied strain relief into the available controller knock out forming a drip loop to avoid water intrusion. Leave the strain relief loose until you have completed wiring.

Small Pedestal Configurations
- Mount the FlowLink CT inside the small pedestal.
- Install the FlowLink CT wire harness through the supplied strain relief into the available controller knock out. Leave the strain relief loose until you have completed wiring.

Pedestal or Chassis Configurations – Mount the FlowLink CT inside the pedestal and attach to chassis.
Step 4 – Connect FlowLink Controller Transceiver (CT) Wires to Controller

**Note:** Do not connect the CT wires unless all FlowLink FT connections have been completed; otherwise this may damage the FlowLink CT.

1. Connect CT Black Wire to controller Valve Common terminal
2. Connect CT Blue Wire to Master Valve terminal
3. Connect CT Green Wire to Converted Station Field Wire
4. Connect CT White Wire to Converted Station terminal
5. Connect CT Red Wire to Flow Input (FL1) terminal
6. **Last Step:** Connect CT Orange wire to 24 VAC (be sure that this wire is installed last)
FlowLink Installation Verification

1. Verify that Power/Activity LED is ON FlowLink CT and wait until LED becomes steady
2. Set the MV mode on the controller to NC or NO depending on MV type
3. Use the controller MANUAL mode to Turn ON Converted Station for at least 5 minutes
4. Wait 90 seconds; Read Flow Value on the Controller (on line 3 of display)
5. Observe flow for 2-3 minutes. Verify that the reported value is steady within +/- 0.1 GPM range

Compatible Flow Sensors

Data Industrial 228 series, CST flow sensor models, Netafim Hydrometer model with either Reed Switch or Photo Diode registers.