




# Line Card




**Web-based building  
management made easy**





## Network Management and User Interface Device

Image	Product Number	Description
	LCI-2	Front end network management device with internet connectivity capability. Color touch screen. Manages up to 63 iWorx® Controllers.







## Logic Control Device

	LCU2-1	<b>Logic Control Unit</b> - Self contained interoperable unit for controlling up to eight (8) logic zones. The LCU's eight (8) outputs can be controlled by a logic zone's schedule or mapped to any of the eight (8) inputs for an override. A photo sensor input is also provided for dawn/dusk logic control (lighting). A logic control system may contain up to eight (8) LCU2 controllers. Functions as part of FTT-10A LonWorks® network.
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## Air Side Control Products

	ALM2-1	<b>Alarm Module Unit</b> — Self-Contained Interoperable Controller for monitoring 8 universal inputs using a thermistor or a switch contact. Digital outputs are provided to drive any external device such as an alarm or light. Functions as part of FTT-10A LonWorks® network.
	ASM2-1	<b>Auxiliary Sensor Input Unit with Energy Monitoring</b> — Self-contained interoperable controller for monitoring auxiliary sensors with inputs for outdoor air temperature, outdoor humidity, and supply water temperature to other devices on the network. Digital inputs provided for energy monitoring via meter pulses and end-of-interval signals. Functions as part of FTT-10A LonWorks® network.
	DUXU3-1	<b>Single Zone Rooftop Package / Air Handling Unit</b> — Self-contained interoperable controller for a single zone DX package units and air handler units with an economizer. Can be configured for up to 4 stages of cooling, modulated or floating point cooling valve, 2 stages of heating, modulated or floating point heating valve. Also controls modulated or two position economizer, IAQ compensation. Individual temperature setpoints are provided for occupied/unoccupied heat and cool cycles along with dehumidification. Functions as part of FTT-10A LonWorks® network. Compatible with TS300 Series Sensors.
	DUXU4-1	<b>Single Zone Rooftop Package / Air Handling Unit</b> — Self-contained interoperable controller for a single zone DX package units and air handler units with an economizer. Can be configured for up to 2 stages of cooling, modulated or floating point cooling valve, 2 stages of heating, modulated or floating point heating valve. Also controls a modulated economizer, IAQ compensation. Individual temperature setpoints are provided for occupied/unoccupied heat and cool cycles along with dehumidification and dehumidification with reheat. Humidification achieved by providing a contact closure for a humidifier. Functions as part of FTT-10A LonWorks® network. Compatible with TS300 Series Sensors.


## Air Side Control Products, continued

Image	Product Number	Description
	<b>MPU2-1</b>	<b>Multiplexed Package Unit</b> — Self-contained interoperable controller for commercial rooftop HVAC requiring VAV zone control with up to four stages of cooling or modulated cooling or floating point cooling and two stages of heating or modulated heating or floating point heating, modulating bypass damper or VFD, modulating or two position economizer, IAQ compensation. Association to pressure dependent VAVD. Has zone limit for operation and supports up to 32 VAVD-1 terminal box unit controllers. Functions as part of FTT-10A LonWorks® network.
	<b>VAVD-1</b>	<b>Variable Air Volume Zone Unit</b> — Pressure dependent VAV zone terminal controller provides a wide range of terminal unit applications. Integrated Actuator, Optional IAQ Alarm Input. Parallel or Series Fan. Independent setpoint for occupied / unoccupied modes. Functions as part of FTT-10A LonWorks® network. Compatible with TS300 Series Sensors.
	<b>VAVI-1</b>	<b>Variable Air Volume Zone Unit</b> — Pressure independent VAV zone terminal controller provides a wide range of terminal unit applications. On Board Air Flow Sensor, Integrated Actuator, Optional IAQ Alarm Input. Parallel or Series Fan. Independent setpoint for occupied / unoccupied modes. Functions as part of FTT-10A LonWorks® network. Compatible with TS300 Series Sensors.
	<b>VPU2-1</b>	<b>Variable Air Volume (VAV) Package Unit</b> — Self-contained interoperable controller for commercial rooftop HVAC requiring VAV zone control with up to four stages of cooling or modulated cooling or floating point cooling and two stage heating or modulated heating or floating point valve control, variable fan speed, modulating or two position economizer, IAQ compensation. Supports up to 60 VAVI-1 terminal box unit controllers. Functions as part of FTT-10A LonWorks® network.
	<b>CCU2-1</b>	<b>Chiller Control</b> — Self-Contained Interoperable Controller for Air or Water cooled Central Plant applications with up to two chiller pumps, two condenser pumps, modulated valve, modulated fan speed, chiller setpoint, chilled water supply and return temperature. Condenser water supply and return temperature, two flow switch inputs, chilled water demand, chiller general alarm. Functions as part of FTT-10A LonWorks® network.
	<b>LHP2-1</b>	<b>Water Source Heat Pump Loop Controller</b> — Self-Contained Interoperable Controller for Liquid (Water) Source Heat Pump central plant controller applications with one cooling tower and one or two single-stage boilers. Applications also include two water pumps configured for lead-lag or continuous operation. Functions as part of FTT-10A LonWorks® network.






## Hydronic & Radiant Control Products

Image	Product Number	Description
	<b>HPU2-1</b>	<b>Water Source Heat Pump Controller</b> — Self-Contained Interoperable Controller for a Single Liquid (Water) Source Heat Pump with a two-stage compressor, reversing valve, and a fan, Functions as part of FTT-10A LonWorks® network.
	<b>BLMC-1</b>	<b>Boiler Modulating/Staging Control</b> — Controls up to four (4) modulating or staged boilers and can be cascaded with another BLMC to operate an additional four (4) boilers. Boiler pumps and system pumps are controlled by triac outputs. Modulating outputs are 0-10v for control of the modulating boilers. Demand inputs (temperature or switch) can be configured to provide for auxiliary and reset demands. Includes two (2) bullet sensors (TRP-1). Functions as part of a FTT-10A LonWorks® network. Outside air temperature sensor (TOA-1) sold separately.
	<b>BZU2-1</b>	<b>Multiple Zone Controller</b> — 5 thermistor inputs & 6 digital outputs for control of up to five heating zones and a common heat source. Demands are communicated to the BLM controller. Heating demand triac output can activate pump relay or zone valve. Network up to 24 BZU2 units (120) zones associated to one BLM. Multiple BZU-BLM associations per LCI-2. Custom naming of zones up to 7 character in length. Functions as part of FTT-10A LonWorks® network. Compatible with TS100 Series Sensors.
	<b>ZXU1-1</b>	<b>Zone Mixing Unit</b> — Provides injection mixing for one loop. Supply and return temperature can be configured separately. Outdoor air temperature, radiant slab temperature and zone temperature are also provided. Boiler enable and primary pump signal provided if the loop is in demand. Heat / cool control selectable. Modulated mixing 0-10V or 2-10V output. Snowmelt mode with extended features. Networking with BLM controller. Functions as part of FTT-10A LonWorks® network. Compatible with TS100 Series Sensors.
	<b>PSC-1</b>	<b>Pump Speed Controller</b> — For controlling any 120 volt circulator pump. Receives an analog (2-10VDC) input from the ZXU1 to control the speed of a pump for injection mixing.

## BTU Metering Products and Accessories

	<b>BTU3-1</b>	<b>BTU Metering Unit</b> - Self-contained interoperable controller for metering the supply water temperature, return water temperature and the flow for up to three zones.
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## Flow and Temperature Sensors for BTU Metering Applications

Image	Product Number	Description
	VFTS5-1	<b>Vortex Flow and Temperature Sensor</b> — 0.25 – 5 GPM (1-20 l/min), for measuring supply water temperature and flow (two-in-one), supplies a ratiometric output signal to the BTU3-1 controller. 1/2" NPT (male) clip lock x 1/2" NPT (male) clip lock connections.
	VFTS10-1	<b>Vortex Flow and Temperature Sensor</b> — 0.5 – 10 GPM (2-40 l/min), for measuring supply water temperature and flow (two-in-one), supplies a ratiometric output signal to the BTU3-1 controller. 3/4" NPT (male) clip lock x 3/4" NPT (male) clip lock connections.
	VFTS26-1	<b>Vortex Flow and Temperature Sensor</b> — 1.25 – 26 GPM (5-100 l/min), for measuring supply water temperature and flow (two-in-one), supplies a ratiometric output signal to the BTU3-1 controller. 3/4" NPT (male) union x 3/4" NPT (male) union connections.
	VFTS52-1	<b>Vortex Flow and Temperature Sensor</b> — 2.6 – 52 GPM (10-200 l/min), for measuring supply water temperature and flow (two-in-one), supplies a ratiometric output signal to the BTU3-1 controller. 1" NPT (male) union x 1" NPT (male) union connections.
	VTS-1	<b>Vortex Temperature Sensor</b> — For measuring return water temperature, supplies a ratiometric output signal to the BTU3-1 controller. 1/2" NPT nipple connection.

## Thermostats and Sensors

Image	Product Number	Description
	TS101-1	<b>Space Temperature Sensor (Thermistor)</b> No display
	TS102F-1	<b>Space Temperature Sensor (Thermistor)</b> With LCD display in degrees F
	TS102C-1	<b>Space Temperature Sensor (Thermistor)</b> With LCD display in degrees C
	TS103-1	<b>Space Temperature Sensor (Thermistor), Adjustable</b> No display
	TS301-1	<b>Digital Temperature Sensor</b> With display, setpoint adjustment, override button
	TS302-1	<b>Digital Temperature &amp; Humidity Sensor</b> With display, setpoint adjustment, override button

## Thermostats and Sensors, continued

Image	Product Number	Description
	<b>TS303-1</b>	<b>Digital Temperature Sensor</b> With display, setpoint adjustment, override button and controller mode functions
	<b>TS304-1</b>	<b>Digital Temperature &amp; Humidity Sensor</b> With display, setpoint adjustment, override button and controller mode functions
	<b>TOA-1</b>	<b>Outdoor Air Temperature Sensor</b> 10K (type III) sensor with enclosure
	<b>TRP-1</b>	<b>Thermistor Type Temperature Sensor</b> 10K (type III ) 1/4" x 1" w/ 24" leads. Bullet style sensor primarily used as a strap-on pipe sensor.

## Installation Wire and Accessories

N/A	<b>WIR-018</b>	<b>1000 Foot Spool of Shielded 18 Gauge Stranded 2 Conductor Wire</b> Plenum rated wire with shield for use when installing temperature sensors and other ancillary control devices.
N/A	<b>WIR-022</b>	<b>1000 Foot Spool of 22 Gauge Stranded Category 4 LON Wire</b> Plenum rated, Echelon approved wire for connecting LON networks.



# For more information

See Taco Catalog #500-1.0 for an overview of the iWorx building management, monitoring and control system. To obtain more information on specific controllers and applications see [www.taco-hvac.com](http://www.taco-hvac.com).

The screenshot shows the iWorx website homepage. At the top, the iWorx logo is displayed next to the text "by Taco Electronic Solutions". To the right, there is a "MEMBER LOGIN" section with a "Click here to register" link, an "Email address" input field, a "Login" button, and a "Find It Fast" search bar. Below the header is a green navigation bar with links for "About Us", "Products", "Applications", "Support", "News", "Contact", and "Home". The main content area features a sidebar on the left with "Related Documents" including "Catalog (1)", "Submittal Data Sheets (15)", "Application Guides (12)", "Installation Guides (13)", "Presentations (4)", "Wiring Guides (2)", "Case Studies (1)", and "Controller Features & Benefits (12)". The main body has a heading "iWorx Web-based Building Management Made Easy" and a sub-heading "Product - iWorx". It contains three paragraphs describing the system's capabilities, a bulleted list of features, and a section for the "iWorx Selection Wizard". To the right, there are two images: one showing various iWorx controllers and another showing a computer monitor displaying the iWorx interface. At the bottom, there is a footer with copyright information and links to "Privacy Policy" and "Site Map".

**iWorx** by Taco Electronic Solutions

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**Related Documents**  
Catalog (1)  
Submittal Data Sheets (15)  
Application Guides (12)  
Installation Guides (13)  
Presentations (4)  
Wiring Guides (2)  
Case Studies (1)  
Controller Features & Benefits (12)

**iWorx** Web-based Building Management Made Easy  
Product - iWorx

iWorx by Taco Electronic Solutions is a powerful, web-based, easily-scalable building management, monitoring and control system designed specifically for the light commercial buildings - up to 50,000 sq ft - and high-end residential markets.

iWorx is ideal for integrating forced air and hydronic systems, including geothermal and solar, and for assuring that each system communicates effectively and works smoothly together.

iWorx delivers effective cost control over a building's energy usage and HVAC equipment maintenance, plus optional BTU metering, in single locations, multi-site or multi-building installations ranging from retail stores, strip malls and restaurants to offices, apartments, schools and high-end residential.

- Affordable
- Web-based
- Easy-to-install
- Simple-to-use
- No software-to-buy or learn
- Self-configuring controllers
- BTU metering option
- Scalable - add only the pre-programmed, equipment-based controllers you need
- Manage the system from any web-enabled device or PC

**iWorx**

**iWorx** Selection Wizard  
The iWorx building management, monitoring and control system is supported by an online iWorx Selection Wizard that offers contractors and design engineers the ability to create and specify iWorx projects in minutes. Using simple input from the user, the iWorx Selection Wizard creates a complete submittal package that includes wiring and air flow diagrams, bill of materials, sequence of operations, and complete job specifications. To obtain a login, please contact your local iWorx sales representative.

Click here to view sales representatives

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