Ubiquity Cloud Building Manager
QD2040

Description

The QD2040 Ubiquity Cloud Building Manager utilizes TCSbus and Modbus protocols for direct communication with external controllers. The QD2040 Building Manager supports two RS485 networks for communication with UbiquiSTAT room controllers, conventional thermostats, HVAC units, sensors, lighting, refrigeration units, variable frequency drives, and energy metering devices.

The QD2040 Building Manager connects with TCS's Ubiquity Cloud Energy Management System, which remotely manages building devices and data collection online via any web browser. Retail stores, banks, offices, "big box" stores, schools, churches, restaurants, educational, and multi-site enterprises are prime applications for the Ubiquity Cloud

Energy Management System, UbiquiSTATs, and QD2040 Building Managers.

Ubiquity Cloud provides extensive site management and data collection tools, giving users full control of their energy usage while reducing operation costs. See the Ubiquity Cloud section on the TCS website for more information.

Device management services, including updates and upgrades to the QD2040 operating system and application, are performed by TCS via Ubiquity Cloud and are included in the Ubiquity Cloud subscription service – there are no additional licensing or device management fees.

Features

- Automatic connection to Ubiquity Cloud to manage all controller networks
- Cloud technology enables the Ubiquity Cloud energy management platform to coordinate device programming and scheduling from anywhere, anytime
- Supports TCSBus and Modbus protocols for all network communications via RS485 wiring
- Provides simultaneous management of various controller types, such as HVAC, lighting, refrigeration, and energy meters
- Automatically detects connected devices and relays their information to Ubiquity Cloud. Ubiquity Cloud is then used to program the monitoring information into the QD2040
- Two built-in serial ports for RS485 network connections support up to 32 devices on each port

- Firewall protection/encrypted communication with Ubiquity Cloud
- Multiple control policies including override strategy
- Integrated local configuration web page
- User-adjustable controller monitoring rate
- Remotely upgradeable gateway software, Linux OS, and security patches via Ubiquity Cloud subscription
- Basic local configuration via laptop/local web browser or command line interface
- Dual Ethernet ports: Port C for LAN connection, and Port L for Local Admin via laptop computer
- Local Admin Port L can be configured as a failover port to the primary Ethernet connection (separate Ethernet connection required)

Specifications

General

Platform:
- AMD64 processor with optically isolated serial communications

Two Integrated RS485 Ports:
- Removable screw terminal blocks
- 22 AWG, three conductor twisted and shielded wire
- Up to 64 controllers per network

Four USB 2.0 Ports: USB-to-RS485 serial converter may be used to add more controller networks (not included). Can connect up to 14 additional USB hubs

Baud Rates: 9600, 19200

Environmental

Operating temperature: 32 – 131°F (0 – 55°C), Good ventilation mandatory. Ideal environment is in a server room
Operating humidity: 0 – 90% Non-condensing
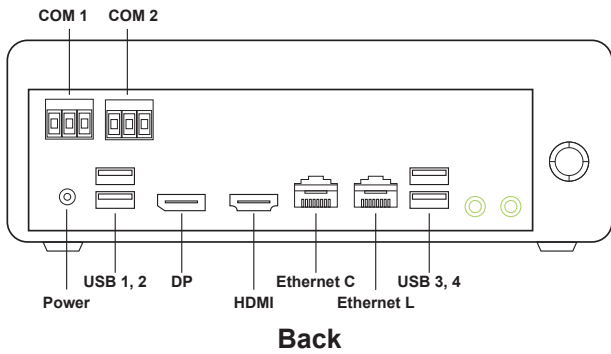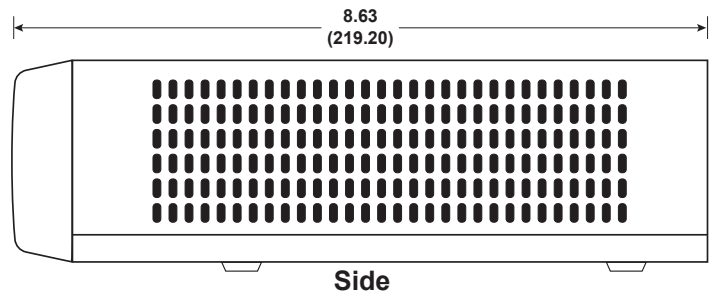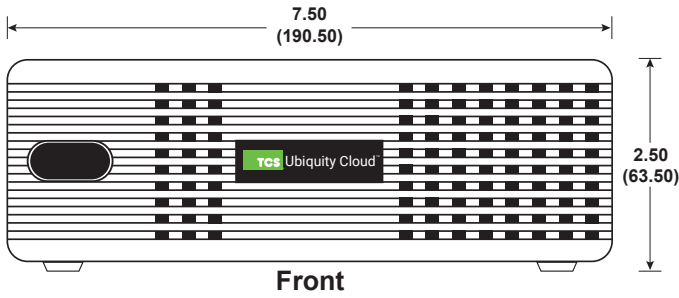**Storage temperature:** 32 – 131°F (0 – 55°C)

Electrical

Supply voltage: 100 – 240 VAC, 165 VA 2.5 A Max, UL, FCC Class A, and CE Listed

Dimensions and Connections

Units in inches (mm)

Front

Side

Back

= Not Used

System Architecture

Ubiquity Cloud

QD2040 TCS

Thermostats

Lighting

HVAC

Refrigeration

Metering
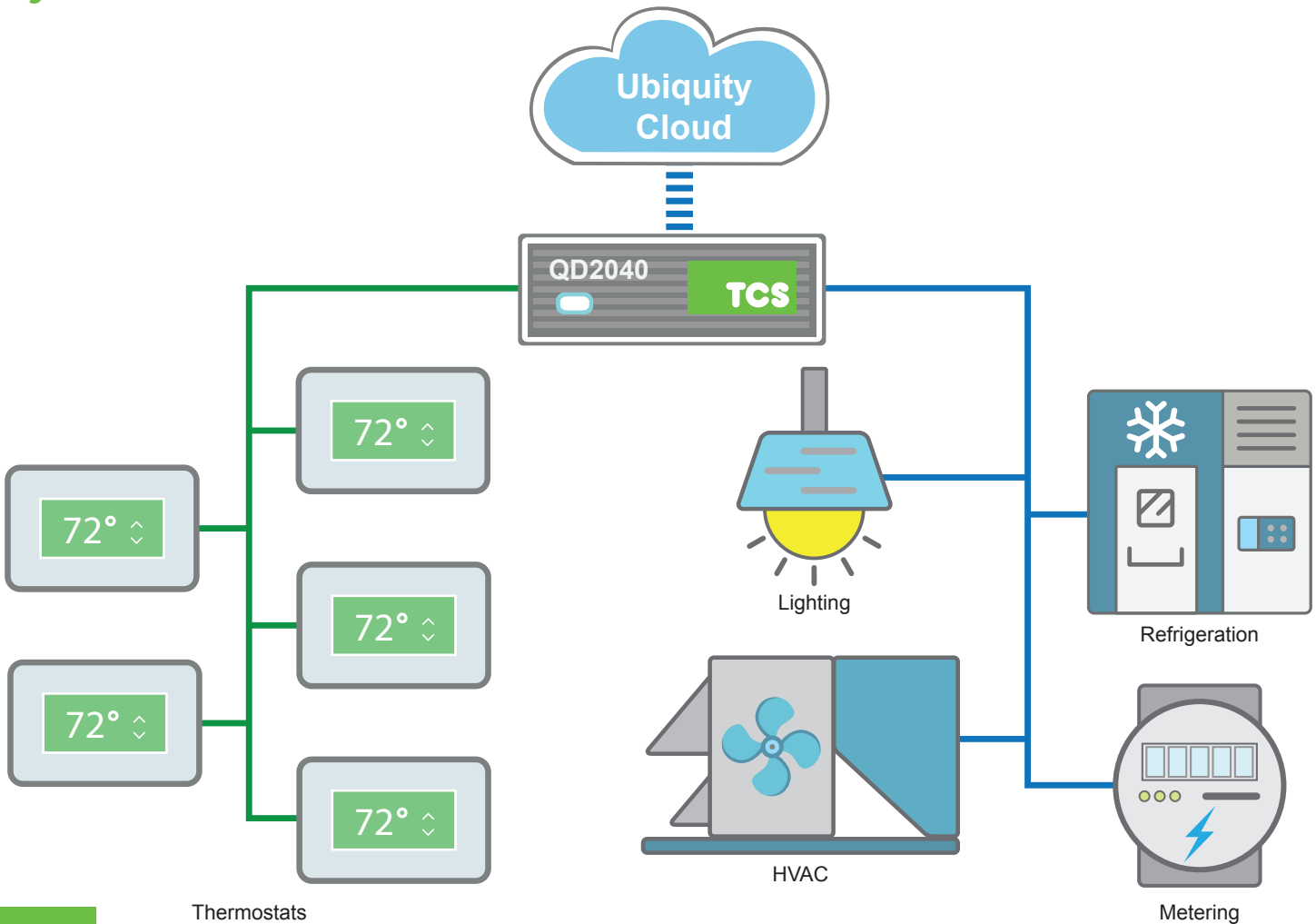
Ordering

Part #	Description
QD2040	Ubiquity Cloud Building Manager

QD2040 Series Accessories

PI6405	Cellular Modem (Model based on geographic location)
QD1010b	USB to RS485 Communications Converter

QD2040 Related Products

US4010 Series	Single-Stage RTU/Zoning UbiquiSTAT Thermostat*
US4020 Series	Multi-Stage RTU UbiquiSTAT Thermostat*
US4040 Series	Advanced RTU UbiquiSTAT Thermostat*
US4050 Series	Advanced Application UbiquiSTAT Thermostat*

Available in four versions: Standard, with WiFi only, with built-in humidity sensor only, and with WiFi and built-in humidity sensor

View our full line at www.tcsbasys.com.

QD2040 Ubiquity Cloud Building Manager

UbiquiSTAT Thermostat

QD1010b USB to RS485 Converter

PI6405 Cellular Modem