75F® Central Control Unit™

A wireless building management system providing in-depth, real-time insight and control.

- Intuitive mobile pairing, configuration and settings setup

- View zones status, comfort index dashboard, and real-time graph of sensor inputs

- Make scheduling and setpoint adjustments

- Manage alerts with severity color coding

- Easy and secure magnetic alignment and spring-based locking slider for the removeable tablet

- Wall mounting compatible with industry standard vertically installed junction boxes

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What do you get when you combine a state-of-the-art building sensor and control supervisor, an applied equipment controller for everything from staged DX cooling to analog VFD and coil control, and an instantly compatible BACnet IP server? Answer: the 75F Central Control Unit (CCU), a removable wall-mounted tablet and on-site user interface for building management.

Customers appreciate real-time data visualization and graphs, zone and equipment-specific performance and status. The elegant and modern design snaps easily and securely into place with a spring-based locking slider.

OVERVIEW

The 75F Central Control Unit (CCU) acts as a wall-mounted aggregation gateway for 75F's wireless terminal equipment modules in a building. The CCU consists of a tablet running Android and a Control Mote that provides inputs and outputs for connecting to central plant equipment.

KEY FEATURES

- Works with single and multi-stage systems, heat pump systems, fan coil units, air handlers, variable flow hydronic systems and more.

- Control up to 48 terminal equipment modules per Central Control Unit.

- Auto changeover.

- Proactive, predictive control in conjunction with 75F cloud servers; able to run program offline.

- Strong, permanent magnets and metal locking tabs help with feel and secure alignment.

- Intuitive Android-based user interface.

ADDITIONAL FEATURES

- Powerful MT8163, quad core processor with 2GB RAM and 32 GB Flash Memory
- Easy mobile pairing, configuration and settings setup.
- Zones status and comfort index dashboard
- Schedule and setpoint adjustments
- System run time and drill down
- Real-time graph of sensor inputs
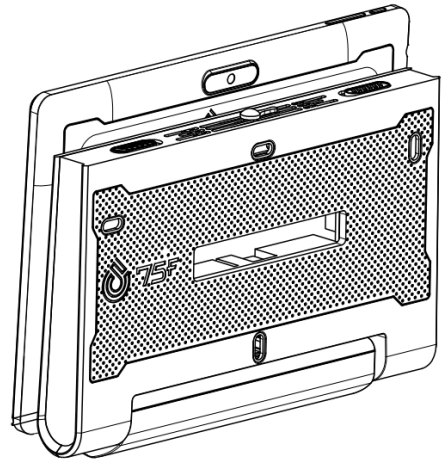- Alerts with severity color coding

COMPATIBLE APPLICATIONS

- 75F Dynamic Airflow Balancing
- 75F Outside Air Optimization
- 75F Smart VAV with Reheat
- 75F Hydronic Controls
- 75F Single Stage Equipment Controls
- 75F Advanced Lighting

INCLUDED

(1) Central Control Unit
(1) Remote Temperature Sensor (RTS)
18" & 20' RTS cables
24V AC power supply
Mounting hardware

75F® Central Control Unit™

MECHANICAL

Dimensions	208.5mm x 145mm x 11.5 mm (8.2" x 5.7" x 0.5")
Mounting	(2) #8 screws over standard electrical junction box
Screen	8" display, 1200 x 800
Operating Temp	32 to 122 F (0 to 50 C)
Termination	Common Pogo Pin termination for USB port and +5V DC power
Microprocessor	Processor MT8163, quad core, 64-bit, Cortex – A53, 1.3GHz
HVAC Control	Two-stage heating and cooling, two-stage fan, 0-10V modulating output for VFD, heating/cooling hydronics, one humidifier

WALL PLATE

Dimensions	202.16mm x 129.29 mm x 25.87mm (7.96" x 5.1" x 1.02")

I/O

Inputs	A. (2) 0-10V analog inputs B. (2) 10k thermistor inputs
Outputs	C. (4) 0-10V or 4-20V mA analog outputs D. (8) 110V AC, 24V DC/1A relays

ELECTRICAL

Supply	24V AC/DC or 5V DC
Consumption	5 VA (typical), 10 VA (max)
Battery	3.7V, 2500mAH, Lithium Polymer

COMMUNICATIONS

Bluetooth	2.4 GHz; used for pairing devices (e.g. 75F Smart Node equipment control
Mesh	900 MHz IEEE 802.15.4-compliant; used for device communication on mesh network
Wired	3-wire communication to backup RTH
Wi-Fi	Wi-Fi to connect to internet

Front view

Top view

202.16mm

37.58mm

Bottom view

202.16mm, 208.5mm

37.58

145mm

208.5mm

14.18mm

Left view

158.48mm

129.29mm

25.87mm, 11.5mm, 20.01mm

25.87mm

25.88mm

37.54mm

Right view