

**UNT1100 Series** 

# **Unitary Controller**



**UNT1100 Series Controller** 

#### Description

The Metasys® Unitary (UNT1100 Series) Controller is an addition to the popular UNT controller family. It is a versatile digital controller for packaged (rooftop) air handling units, unit ventilators, fan coils, heat pumps, and other terminal units. It can also be configured as a generic inputs device for basic point monitoring applications when used within a Metasys Network.

The UNT1100 Series has several features not available with the standard UNT product, including: additional inputs/outputs, low ambient temperature operation, up to four analog outputs (model dependent), relay binary outputs, and an option for removable screw terminations.

Use the UNT 1100 as a standalone controller, or as part of a Metasys Network through a Network Control Module (NCM) or N30 Supervisory Controller.

#### **Features**

- standalone control or network communication over N2 Bus
- · built-in control program library
- · expanded point capacity
- · relay outputs
- · removable screw termination options
- · LED indicators
- · low ambient temperature operation

#### To Order

Specify the code number from the following selection chart.

#### Selection Chart

Code Number	Termination Type <sup>(a)</sup>	Analog Inputs	Binary Inputs	Analog Outputs	Binary Outputs
AS-UNT1108-0	Spade Lug	6 RTD Temp. Elem. (NI, SI, or PT) 0-10 VDC Trans. 2K ohm Setpoint Potentiometers Voltage or resistive DIP switch selectable	6 6-Dry Contacts 24 VAC 10 mA minimum	0	8 24 VAC relays at 2 Amps each (10 mA minimum), 13 Amp Inrush Source Sinking or Isolated <sup>(b)</sup> Contact, Jumper Selectable
AS-UNT1126-0	Spade Lug	6 RTD Temp. Elem. (NI, SI, or PT) 0-10 VDC Trans. 2K ohm Setpoint Potentiometers Voltage or resistive DIP switch selectable	6 6-Dry Contacts 24 VAC 10 mA minimum	2 0-10 VDC @10 mA	6 24 VAC relays at 2 Amps each (10 mA minimum), 13 Amp Inrush Source Sinking or Isolated <sup>(b)</sup> Contact, Jumper Selectable
AS-UNT1144-0	Spade Lug	6 RTD Temp. Elem. (NI, SI, or PT) 0-10 VDC Trans. 2K ohm Setpoint Potentiometers Voltage or resistive DIP switch selectable	6 6-Dry Contacts 24 VAC 10 mA minimum	4 0-10 VDC @10 mA	4 24 VAC relays at 2 Amps each (10 mA minimum), 13 Amp Inrush Source Sinking or Isolated <sup>(b)</sup> Contact, Jumper Selectable

<sup>(</sup>a) Accommodates removable screw terminations that are available as separate kits (AP-TBK1002-0 and AP-TBK1003-0).

<sup>(</sup>b) Voltage-free



## **UNT1100 Series Unitary Controller (Continued)**

#### **Options**

Application Options		Software Options	
	Unit Vents:	ASHRAE Cycle 1 ASHRAE Cycle 2 ASHRAE Cycle 3 ASHRAE Cycle W	
Primary Equipment Types	Heat Pumps:	Water to Air Air to Air	
	Packaged Roofto	ps	
	Fan Coils		
	Generic Point Mu	ltiplexer	
Primary Control Strategies	Room/Zone control		
	Dry bulb		
	Outside air enthalpy		
Economizer Changeover	Differential outside/return air temperature		
Strategies	Outside air and return air enthalpy comparison		
	Binary input from external economizer		
	-Supervisory network command		

Application Options	Software Options
Mixed Air Control	Proportional output to outdoor air/room damper actuators
Strategies	Binary output to economizer actuator
Otratogroo	Zone bus output to OA/RA damper actuator
	Modulated single coil
	Staged (2-stage max)
Heating/Cooling Configuration	Modulated common heating/cooling coil
Corniguration	Reversing valve logic
	Incremental
Fan Start/Stop	Continuous Operation
r arr Start/Stop	Cycled with call for heating/cooling
Lighting Control	On and off outputs to lighting relay in conjunction with OCC/Unocc mode
Unoccupied Control	Setup and setback, morning warmup and cooldown

ote: The UNT1100 Series controller is not intended for 3-wire or floating control, since this could adversely affect the service life of the relay outputs.

Binary outputs are not intended for low current analog applications.

### **Accessories (Order Separately)**

Code Number	Description
AS-XFR100	Power Supply, 100 VA Transformer
EN-EWC15-0	Power Supply, 50 VA Transformer
AS-ZTU100-1	Zone Terminal
AS-ENC100-0	Enclosure Kit
EN-EWC10-0	Enclosure Kit
EN-EWC15-0	Enclosure Kit
AS-CBLPRO-2	Interface Converter for HVAC PRO Software
AS-CVTPROx00-0	Interface Converter for HVAC PRO Software
AS-TBKIT-0	Removable Screw Terminations, kit consists of five of each plug type
AP-TBK1002-0	Removable Screw Terminations, 2 position screw termination kit pkg/100
AP-TBK1003-0	Removable Screw Terminations, 3 position screw termination kit pkg/100
TE-6700 Series	Zone Sensors
AP-TMZ1600-0	Room Sensor with LCD Display
MM-CVT101-0	RS-485 to RS-232 Converter

## **Specifications**

UNT1100 Series Unitary Controller			
Product Codes	Spade quick connects: AS-UNT1108-0 6AI, 6BI, 0AO, 8BO AS-UNT1126-0 6AI, 6BI, 2AO, 6BO AS-UNT1144-0 6AI, 6BI, 4AO, 4BO		
Ambient Operating Conditions	-40 to 60° C (-40 to 140° F) 10 to 90% RH		
Dimensions	165 x 163 x 56 mm (6.5 x 6.4 x 2.2 in)		
Power Requirements	24 VAC, 50/60 Hz at 40 VA (per typical system)		
N2 Bus	Isolated		
Zone Bus	8-Pin Phone Jack or Terminal Block on Controller		
Shipping Weight	0.64 kg (1.4 lbs)		
Agency Compliance	CSA C22.2 No. 205, FCC Part 15, Subpart J, Class A, IEEE 446, IEEE 472, IEEE 518, IEEE 587 Category A, UL 916, UL 864 NEMA ICS 2, Part 2-230, VDE 0871 Class B		
Supervisory Support	NCM or N31 Series or CPN		