

UDC3500 Universal Digital Controller

Model Selection Guide
51-51-16-81 Issue 11

New! Easy To Use UDC3500 1/4 DIN Single & Dual Loop Controller

The UDC3500 Controller packs new powerful features while retaining all the simplicity and flexibility of the industry standard UDC3300 Controller. Many new features include:

- NEMA 4X, IP66 Front Face Protection
- Built-in infrared communications port for configuring with a Pocket PC or Laptop
- PC Based Configuration Tools
- Ethernet Communications
- 20 Segment Set Point Programming
- One or Two Loops of Control
- Real Time Clock

Model Selection Guide with Price Data

Honeywell Proprietary



UDC3500 Controller

Instructions

- Select the desired key number. The arrow to the right marks the selection available.
- Make the desired selections from Tables I through VI using the column below the proper arrow. A dot (•) denotes availability.

Key Number	I	II	III	IV	V	VI
_____	_____	_____	_____	_____	_____	_____

List Price equals the sum of prices for all selections made.

KEY NUMBER - UDC3500 Single & Dual Loop Controller

Description
Digital Controller for use with 90 to 264Vac Power + Current Output #1
Digital Controller for use with 24Vac/dc Power + Current Output #1

If Applicable

Selection	Availability	Stocking P/N	U.S.\$
DC3500	↓		675
DC3501		↓	705

TABLE I - Specify optional Output and/or Alarms

Output #2	None Current Output (4 to 20mA, 0 to 20 mA) (Current Output #3) Electro Mechanical Relay (5 Amp Form C) Solid State 1 Amp (Zero-Crossing Type) Open Collector transistor output Dual 2 Amp Relays (Form A) (Heat/Cool, Pos Prop, TPSC, Relays 1 & 2)
Relay Outputs #3, #4 and #5	None Three (3) E-M Relay (5 Amp Form C)

0 _	•	•		0
C _	•	•		25
E _	•	•		25
A _	•	•		25
T _	•	•		25
R _	•	•		57
_ 0	•	•		0
_ E	•	•		47

TABLE II - Communications and Software Selections

Communications	None Current Output #2 + (4) Digital Inputs Current Output #2 + (4) Digital Inputs + Modbus RS-485 10 Base-T Ethernet (Modbus RTU) + (4) Digital Inputs
Software Selections	Standard Functions, Includes Accutune Math Option Set Point Programming (1 Program, 20 Segments) Set Point Programming Plus Math (1 Program, 20 Segments) HealthWatch SPP + HealthWatch (1 Program, 20 Segments) Math + HealthWatch SPP + Math + HealthWatch (1 Program, 20 Segments)
Enhanced	Enhanced SPP (4 Programs, 20 Segments each) Enhanced SPP + Math (4 Programs, 20 Segments each) Enhanced SPP + HealthWatch (4 Programs, 20 Segments each) Enhanced SPP + Math + HealthWatch (4 Programs, 20 Segments each)
Loops of Control	Single Loop 2 Loops + Internal Cascade
Real-Time Clock	None Real-Time Clock (RTC)

0 _ _ _	•	•		0
1 _ _ _	•	•		275
2 _ _ _	•	•		325
3 _ _ _	•	•		325
_ 0 _ _	•	•		0
_ A _ _	•	•		175
_ B _ _	•	•		75
_ C _ _	•	•		250
_ D _ _	•	•		75
_ E _ _	•	•		125
_ F _ _	•	•		235
_ G _ _	•	•		290
_ H _ _	•	•		210
_ J _ _	•	•		370
_ K _ _	•	•		280
_ L _ _	•	•		435
_ _ 0 _	•	•		0
_ _ 2 _	•	•		175
_ _ _ 0	•	•		0
_ _ _ C	•	•		35

TABLE III - Input types can be changed in the field

Input 1	TC, RTD, mV, 0-5V, 1-5V
	TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA
	TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA, -1-1V, 0-10V
Input 2	None
	TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA
	TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA, -1-1V, 0-10V
	Two HLAI instead of 1 LLAI
	Relative Humidity (Requires Input 2)
Input 3	Carbon, Oxygen or Dewpoint (Requires Input 2)
	None
	TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA
	TC, RTD, mV, 0-5V, 1-5V, 0-20mA, 4-20mA, -1-1V, 0-10V
	Two HLAI instead of 1 LLAI
	Slidewire Input for Position Prop. (Requires Dual Relay Output)

TABLE IV - Options

Approvals	CE (Standard)
	CE, UL and CSA
Tags	None
	Stainless Steel Customer ID Tag - 3 lines w/22 characters/line
Special Options	None
	Custom Calibration (0.05%) For one Range Type Only (Note 1)
Future Options	None
	None

TABLE V - Product Manuals

Manuals	Product Information on CD - (English)
	English Manual (Hard Copy)
	French Manual (Hard Copy)
	German Manual (Hard Copy)
	Italian Manual (Hard Copy)
	Spanish Manual (Hard Copy)
Certificate	None
	Certificate of Conformance (F3391)

TABLE VI

	None
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Availability		DC 3500 3501		If Applicable	U.S.\$
Selection	↓	↓	↓		
1 _ _	•	•			0
2 _ _	•	•			15
3 _ _	•	•			46
_ 0 _	•	•			0
_ 1 _	•	•			145
_ 2 _	•	•			185
_ 3 _	•	•			155
_ 5 _	b	b			145
_ 6 _	b	b			250
_ _ 0	•	•			0
_ _ 1	•	•			145
_ _ 2	•	•			185
_ _ 3	•	•			155
_ _ 4	a	a			145

0 _ _ _	•	•			0
1 _ _ _	•	•			35
_ 0 _ _	•	•			0
_ T _ _	•	•			45
_ _ 0 _	•	•			0
_ _ 1 _	•	•			280
_ _ 0 _	•	•			0
_ _ _ 0	•	•			0

0 _	•	•			0
E _	•	•			15
F _					
G _					
I _					
S _					
_ 0	•	•			0
_ C	•	•			30

0	•	•			0
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Note 1: The specific range and input actuation to be calibrated to 0.05% must be specified for each input.

Form F3399 Supplemental Data must be completed. This form can be downloaded from the Honeywell SalesNet site or Global Technical Services site: ><http://content.honeywell.com/ipc/faq/><

Only one range type can be calibrated for each input. All other universal ranges will remain at 0.10%.

ORDERING INSTRUCTIONS: These are provided as guidance for ordering such as those listed

1. Part numbers are provided to facilitate Distributor Stock.
2. Orders may be placed either by model selection or by part number.
3. Part numbers are shown within the model selection tables to assist with compatibility information.
4. Orders placed by model selection are systematically protected against incompatibility.
5. Compatibility assessment is the responsibility of the purchaser for orders placed by part number.
6. Items labeled as N/A are not available via the stocking program and must be ordered by model selection.

RESTRICTIONS

Restriction Letters	Available Only With		Not Available With	
	Table	Selection	Table	Selection
a	I	R _		
b	III	1 _ _		

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Supplemental Accessories & Kits

Description		Part Number	List Price
Bezel Assembly and Bezel Gasket		51453143-503	**
Display/Keyboard (with IR)		51452845-501	**
Power/Output PWA with Current Out #1 and E-M Relay (90-264 Vac)		51452831-501	**
Power/Output PWA with Current Out #1 and E-M Relay (24 Vac/dc)		50006376-501	**
Optional Analog Input PWA		51452825-501	**
2nd Current Output/Digital Inputs/RS-422/485 Communications PWA		51452837-502	**
Digital Inputs/Ethernet Communications PWA		51452840-501	**
MCU/Inputs PWA		51452828-502	**
Electro-Mechanical Relay		30755306-501	**
Open Collector Output PWA		30756679-501	**
Solid State Relay		30756725-501	**
3rd Current Output PWA		51452834-501	**
Dual Electromechanical Relay PWA		51452807-501	**
Optional Relay PWA (Relays 3, 4 & 5)		51452843-501	**
Ethernet Cable Jack Assembly (DONGLE)		50002382-501	**
Ethernet Adaptor Kit		50010425-501	**
Case Assembly (including Mounting Kit with four brackets)		51452846-501	**
Varistor (MOV) 120 Vac		30732481-501	**
Varistor (MOV) 240 Vac		30732481-502	**
Thermocouple Input Cold Junction Resistor Assembly		51453364-501	**
4-20 mA Input Resistor Assembly (250 ohm)		30731996-506	**
0-10 Volt Input Resistor Assembly (100K pair)		30754465-501	**
Mounting Kits (12 Brackets)		51452763-501	**
DIN Adaptor Kit		30755223-003	**
Process Instrument Explorer Software		50001619-001	**
Math Software Upgrade		50004636-501	**
SPP Software Upgrade		50004636-502	**
Healthwatch		50004636-503	**
Two Loops/Cascade		50004636-504	**
Battery Replacement Kit		51453140-501	**
Panel Bracket Kit		50004821-501	**
Product Information on CD	All Languages	51453375-501	**
Quick Start Manual (2 page) Standard	English	51-52-25-130	**
Product Manual	English	51-52-25-120	**

** Consult Honeywell Order Entry Systems for current parts pricing.