New for 2019 . . .

# smarty dw240 series

drive.web

the world's most advanced Universal Automation Controller

Full featured PLC Advanced Motion Control Smart Process Control

Distributed, deterministic processing over Ethernet

Homogeneous integration for drives, HMIs, remote I/O

savvy system design tools

Right for the IIoT future

Easy, intuitive, affordable, expandable

For systems of any size or complexity





The NEW smarty dw240 series controller consists of a "cassette" that connects directly to system field wiring via four alternative, passive "terminal carriers". This means big installation savings!

### smarty1

## basic UAC - 37 terminals - Analog & Digital I/O

#### Generic Stock Build Includes:

100baseTX Ethernet, auto-negotiating, USB microB

Power: 24VDC

dw build options -04 -05 -25 -26, Clamp Terminals, DIN Rail Mounting

- 8 Al analog in, -11V to +11VDC,  $100K\Omega$ , up to 1 KHz (can be used as digital inputs)
- 8 AO analog out,  $\sim$ 0.2 to +10.5VDC, 10mA, up to 1KHz (can be used as DO or reference voltages)
- 8 DI digital in,  $100K\Omega$ , 8V threshold,  $\pm 3V$  hysteresis, 50V max, up to 1 KHz (can also be used as event inputs)
- 8 DO digital out, 24V source, up to 350mA (shared), over current protected



#### smarty2

advanced UAC - 37 terminals - Analog & Digital I/O

#### **Generic Stock Build Includes:**

100baseTX Ethernet, auto-negotiating, USB microB

XIO Port for extended I/O options

Battery back up for realtime clock

Port options for CAN & ModbusRTU

Power: 24VDC

dw build options -04 -05 -06 -10 -25 -26 -29 -39,

Master Modbus RTU (unisolated), Clamp Terminals, DIN Rail Mounting

- 8 Al analog in, -11V to +11VDC,  $100K\Omega$ , up to 1 KHz (can be used as digital inputs)
- 8 AO analog out, ±10.5VDC, 10mA, up to 1KHz (can be used as DO or reference voltages)
- 8 DI digital in,  $100K\Omega$ , 8V threshold,  $\pm 3V$  hysteresis, 50V max, up to 1 KHz (can also be used as event inputs)
- 8 DO, digital out, 24V source, up to 350mA (shared), internally current limited



### **smarty3** advanced UAC - 61 terminals - with encoder & steppers

Generic Stock Build Includes: 100baseTX, auto-negotiating, USB microB | XIO Port for extended I/O options | Battery back up for realtime clock Port options for CAN & ModbusRTU | Power: 24VDC | dw build options -04 -05 -06 -10 -25 -26 -29 -39 | Master Modbus RTU (unisolated)

Clamp Terminals | DIN Rail Mounting



(140mm x 87mm x 77mm)

- 8 AI analog in, -11V to +11VDC,  $100K\Omega$ , up to 1 KHz (can be used as digital inputs)
- 8 AO analog out, ±10.5VDC, 10mA, up to 1KHz (can be used as DO or reference voltages)
- 8 DI digital in,  $100K\Omega$ , 8V threshold,  $\pm 3V$  hysteresis, 50V max, up to 1 KHz (can be used as event inputs)
- 8 DO digital out, 24V source, up to 350mA (shared) internally current limited
- 4 FT Frequency/Timing
  Frequency/event input: 5V max, up to 100KHz
  Frequency/Stepper output: 5V sinking, up to 350mA (shared)
  F inputs can be used as event inputs or digital inputs
  F outputs can be used to generate frequency,
  control stepper amplifiers or as digital outputs
- 1 AB Encoder, differential inputs (5.5V max), up to 1MHz

## **smarty4** advanced UAC - 103 terminals - with encoders, steppers & more!

Generic Stock Build Includes: 100baseTX Ethernet, auto-negotiating, USB microB | XIO Port for extended I/O options

Battery back up for realtime clock | Port options for CAN & ModbusRTU | Power: 24VDC | dw build options -04 -05 -06 -10 -25 -26 -29 -39

Master Modbus RTU (unisolated) | Clamp Terminals | DIN Rail Mounting



- 8 Al analog in, -11V to +11VDC,  $100K\Omega$ , up to 1 KHz (can be used as digital inputs)
- 8 AO analog out, ±10.5VDC, 10mA, up to 1KHz (can be used as DO or reference voltages)
- 8 DI digital in,  $100K\Omega$ , 8V threshold,  $\pm 3V$  hysteresis, 50V max, up to 1 KHz (can also be used as event inputs)
- 8 DO digital out, 24V source, up to 350mA (shared), internally current limited
- 2 Cl Current Input, 4-20mA, 0-20mA, 20-4mA, 20-0mA,  $100\Omega$
- 6 FI Frequency in: up to 100KHz, 30V max, 100K $\Omega$  with pull-up or pull-down. Can be event or digital inputs.
- 7 TO Timing Output, up to 500KHz, 30V max, sinking, pull-up, up to 350mA (shared). For frequencies, steppers or DO
- 2 ABZ Encoders, EIA-422/485 differential (5V max), up to 1MHz
- 2 AB Reconnect terminals for encoders

# driv€.ш€b

distributed control . . . the next generation **smarty!** 

smarty4

Peer-to-Peer Ethernet

**Full Featured PLC Functions** 

Advanced Process Control **Basic Motion Control** 

Advanced Motion Control drive.web distributed control

Modbus TCP/IP & EIP/PCCC

100baseTX Ethernet

USB microB port

8 analog inputs

8 analog outputs

8 digital inputs

8 digital outputs 4 status LEDs

XIO extended I/O port

Battery backup for clock

**Optional Drive Interface** 

Frequency Inputs/Outputs

**CANopen & ModbusRTU ports** 



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*s*martu<sup>2</sup> 



smarty<sup>3</sup>



dw244-DM-C4CD

dw248-DM-C4CD

Even Faster More Compact More Versatile More Memory More I/O

Quicker, Easier Field Wiring

100% Compatible with all existing speedys, smartys, and savvyPanels!



Designed & built with ingenuity in the USA!

Generic UAC dw241-BX-C1CD P2 Vector Drive UAC E3 Industrial Drive UAC **CANopen UAC** 

dw240-DM-C2CD dw244-DM-C2CD dw248-DM-C2CD dw249-DM-C2CD dw240-DM-C3CD dw244-DM-C3CD dw248-DM-C3CD dw249-DM-C3CD

dw249-DM-C4CD ✓

1

(bipolar outputs)

1

(unipolar outputs) (bipolar outputs) 1

(2 steppers)

6 frequency inputs + 7 timing outputs (3 steppers)

(bipolar outputs)

1

1

1

1

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2 encoders, differential ABZ + reconnect terminals

4 frequency inputs or timing outputs

Encoder