

New for 2019 . . .

smarty dw240 series



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!*

smarty 1

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 AI analog in, -11V to +11VDC, 100K Ω , up to 1 KHz
(can be used as digital inputs)
- 8 AO analog out, ~0.2 to +10.5VDC, 10mA, up to 1KHz
(can be used as DO or reference voltages)
- 8 DI digital in, 100K Ω , 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



dw241-BX-C1CD

only 4.2" wide x 3.5" high x 3.1" deep
(105mm x 87mm x 77mm)

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 AI analog in, -11V to +11VDC, 100K Ω , up to 1 KHz
(can be used as digital inputs)
- 8 AO analog out, \pm 10.5VDC, 10mA, up to 1KHz
(can be used as DO or reference voltages)
- 8 DI digital in, 100K Ω , 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



dw240-DM-C2CD

only 4.2" wide x 3.5" high x 3.1" deep
(105mm x 87mm x 77mm)

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



dw240-DM-C3CD
only 5.5" wide x 3.5" high x 3.1" deep
(140mm x 87mm x 77mm)

- 8 AI analog in, -11V to +11VDC, 100K Ω , up to 1 KHz
(can be used as digital inputs)
- 8 AO analog out, ± 10.5 VDC, 10mA, up to 1KHz
(can be used as DO or reference voltages)
- 8 DI digital in, 100K Ω , 8V threshold, ± 3 V 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



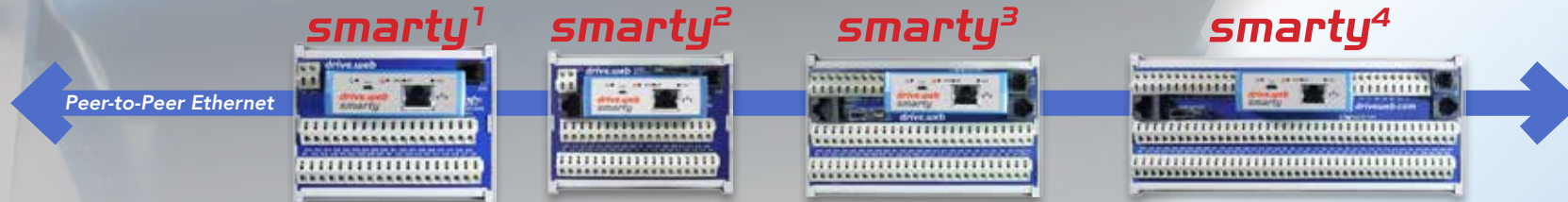
dw240-DM-C4CD
only 8.3" wide x 3.5" high x 3.1" deep
(210mm x 87mm x 77mm)

- 8 AI analog in, -11V to +11VDC, 100K Ω , up to 1 KHz
(can be used as digital inputs)
- 8 AO analog out, ± 10.5 VDC, 10mA, up to 1KHz
(can be used as DO or reference voltages)
- 8 DI digital in, 100K Ω , 8V threshold, ± 3 V 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 CI Current Input, 4-20mA, 0-20mA, 20-4mA, 20-0mA, 100 Ω
- 6 FI Frequency in: up to 100KHz, 30V max, 100K Ω
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

drive.web
smarty



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



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!

| | smarty ¹ | smarty ² | smarty ³ | smarty ⁴ |
|-------------------------------|---------------------|--|---------------------|---|
| Generic UAC | dw241-BX-C1CD | dw240-DM-C2CD | dw240-DM-C3CD | dw240-DM-C4CD |
| P2 Vector Drive UAC | - | dw244-DM-C2CD | dw244-DM-C3CD | dw244-DM-C4CD |
| E3 Industrial Drive UAC | - | dw248-DM-C2CD | dw248-DM-C3CD | dw248-DM-C4CD |
| CANopen UAC | - | dw249-DM-C2CD | dw249-DM-C3CD | dw249-DM-C4CD |
| Full Featured PLC Functions | ✓ | ✓ | ✓ | ✓ |
| Advanced Process Control | ✓ | ✓ | ✓ | ✓ |
| Basic Motion Control | | ✓ | | |
| Advanced Motion Control | | | ✓ | ✓ |
| drive.web distributed control | ✓ | ✓ | ✓ | ✓ |
| 100baseTX Ethernet | ✓ | ✓ | ✓ | ✓ |
| Modbus TCP/IP & EIP/PCCC | ✓ | ✓ | ✓ | ✓ |
| USB microB port | ✓ | ✓ | ✓ | ✓ |
| 8 analog inputs | ✓ | ✓ | ✓ | ✓ |
| 8 analog outputs | (unipolar outputs) | (bipolar outputs) | (bipolar outputs) | (bipolar outputs) |
| 8 digital inputs | ✓ | ✓ | ✓ | ✓ |
| 8 digital outputs | ✓ | ✓ | ✓ | ✓ |
| 4 status LEDs | ✓ | ✓ | ✓ | ✓ |
| XIO extended I/O port | | ✓ | ✓ | ✓ |
| Battery backup for clock | | ✓ | ✓ | ✓ |
| CANopen & ModbusRTU ports | | ✓ | ✓ | ✓ |
| Optional Drive Interface | | ✓ | ✓ | ✓ |
| Frequency Inputs/Outputs | | 4 frequency inputs or timing outputs (2 steppers) | | 6 frequency inputs + 7 timing outputs (3 steppers) |
| Encoder | | 1 encoder, differential AB + reconnect terminals | | 2 encoders, differential ABZ + reconnect terminals |