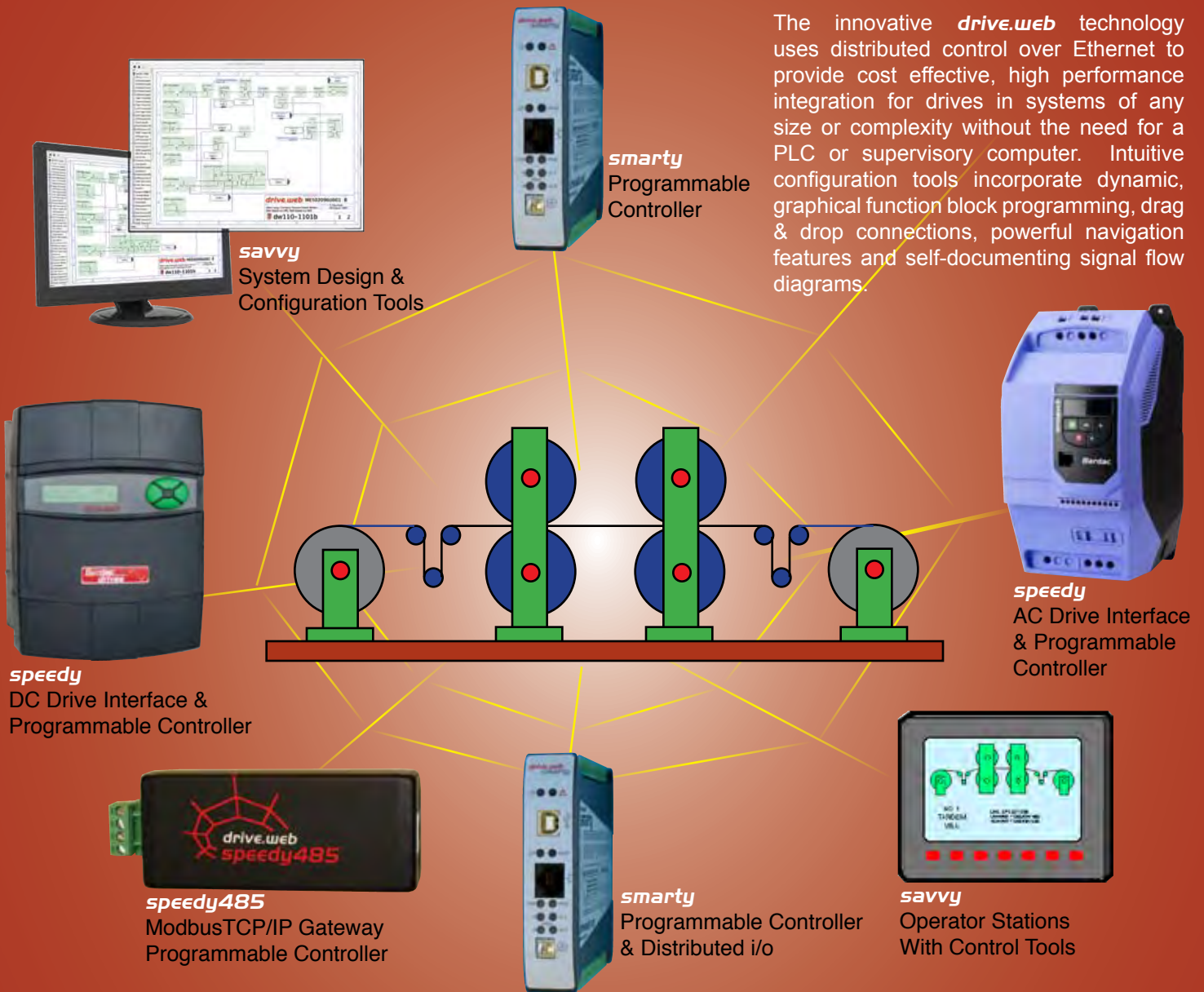


# drive.web

## DISTRIBUTED CONTROL TECHNOLOGY

### INTEGRATED CONTROL OVER ETHERNET FOR DRIVES & SYSTEMS



#### SMART, RELIABLE CONTROL

- Cost effective for systems of any size or complexity
- Distributed control ensures no performance limitations
- Peer-to-peer networking over Ethernet
- Innovative Signal Flow Diagram option
- Intuitive graphical function block programming
- Easy drag 'n' drop connections
- Powerful navigation tools
- Automated software updates
- On board full graphical configuration storage
- Internet accessible

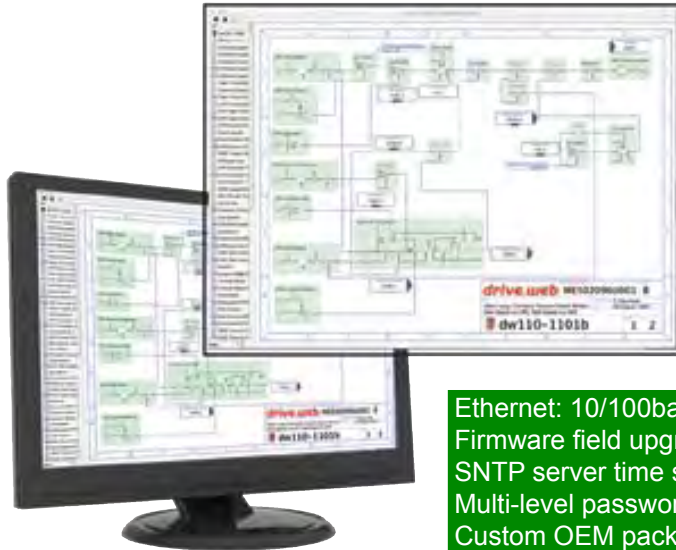
#### EASY INTUITIVE SOLUTIONS

- Coordinated line drives
- Winders
- Position control
- Electronic line shaft
- Spindle orientation
- Registration
- Remote system access
- Drive system integration
- Distributed i/o



# smarty

A range of compact, DIN rail mounting, **drive.web** controllers with a wide selection of i/o and communications options. **smarty**, used solo or in peer-to-peer networks, can easily be interfaced to most drives, operator stations, PLCs, etc.



**TOOLS** - The **savvy** graphical design software can be downloaded FREE from [www.driveweb.com](http://www.driveweb.com)

**VIEW** - The signal flow diagram option provides a clear, easy to navigate presentation of all system connections & functions.

**SUPPORT** - FREE online training seminars are held every week. To register please call or contact [training@driveweb.com](mailto:training@driveweb.com).

## smarty

Model dw210  
4.1" h, 4.8" d, 0.9" w  
(104, 122, 22.5 mm)

Ethernet: 10/100baseTX auto-negotiating, auto-crossover  
Firmware field upgradable  
SNTP server time synchronization  
Multi-level password protection  
Custom OEM packages with personalized firmware and tools

## smarty FEATURES & OPTIONS

The basic model dw210 **smarty** controller includes **drive.web** Ethernet and:

- Basic function block library with arithmetic, logic, clamps, switches, PI, and utilities
- 8 configurable i/o: +/-10V analog in or +/-10V analog out or 24V digital in.
- 8 configurable i/o: 0-10V analog in or 24/12/5V digital in or +24V digital out (source or sink)

### dw210 OPTIONS

- Modbus TCP/IP slave over Ethernet
- Process Control Function Block Library (PIDs, profilers, timers, comparators, lots more)
- Winder Control Function Block Library (diameter calculation, torque comp, taper tension)
- Math Function Block Library (Trigonometry, Exponential, Log)
- Encoder Control Function Block Library (registration, orientation, electronic line shaft)
- Power over Ethernet
- Internal encoder input (differential A & B, without marker, with 5VDC encoder supply)
- Additional encoder options via external module
- ModbusRTU master or slave (RS485) port
- 115VAC or 230VAC digital i/o voltage isolator

**smarty** external encoder module options:

- External single or dual encoder with marker, 5VDC encoder supply & 24V event inputs
- Encoder retransmit buffered outputs



**smarty**  
model dw210  
with external dual  
encoder module



**speedy485**  
Model dw117  
1.3" h, 0.9" d, 4.1" w  
(33, 22, 104 mm)

# speedy

A range of compact, programmable controllers providing inexpensive, easy, fast, peer-to-peer networking over Ethernet for most drives, operator stations, etc.

## speedy VERSIONS

**speedy** basic controllers are plug-in cards for specific drive option card slots.

**speedy485**, is a small package with a RS485 device interface



## ADDITIONAL DETAIL DATA SHEETS

**smarty** dw210

**speedy485**

**smarty packs** - Winders

**smarty packs** - Electronic Line Shaft/Registration

**smarty packs** - Coordinated Drive Line Master

# drive.web

## take control, it's so easy!

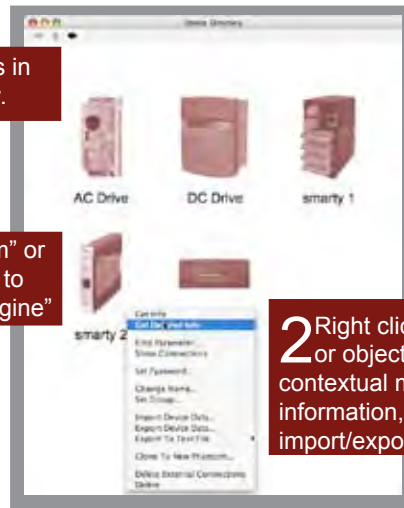
### savvy SIGNAL FLOW PROGRAMMING

The **savvy** graphical tools for the **drive.web** technology are smart and easy. They use an innovative signal flow diagram format to simplify and integrate the processes of design, documentation, configuration, testing, monitoring and controlling your drive or complete drive system.

- ✓ Clear signal flow documentation & graphical function blocks ensure easy system visibility.
- ✓ Device storage of complete graphical data simplifies and secures long term maintenance management.
- ✓ Provides an easy user interface with multiple levels of password protection.
- ✓ Easy trend charts, parameter “docks” and data capture and export help you ensure top process quality.

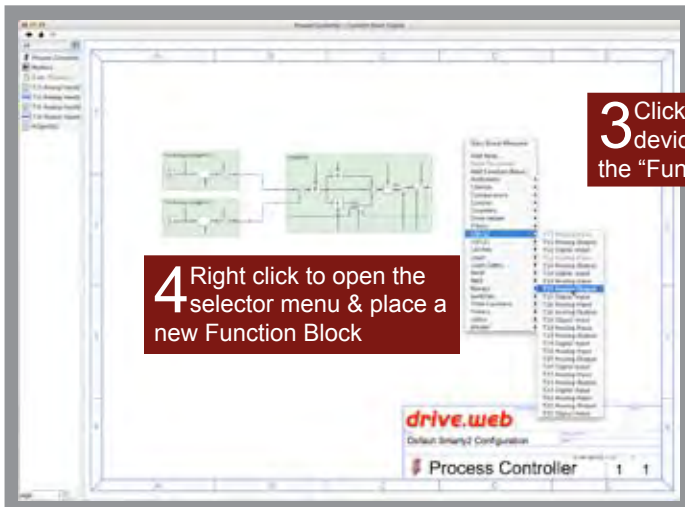
Intuitive programming with a few easy steps ...

**1** Create “phantom” devices or find real devices in your system in the “Device Directory” window.



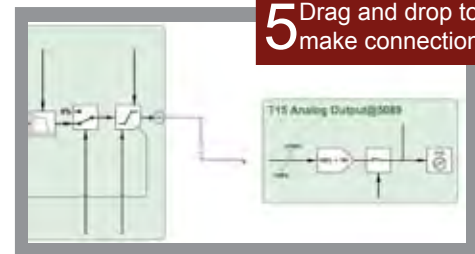
**2** Right click on any device or object to open its contextual menu and get information, change names, import/export data, etc.

**3** Click on a “Phantom” or device to drill down to the “Function Block Engine”

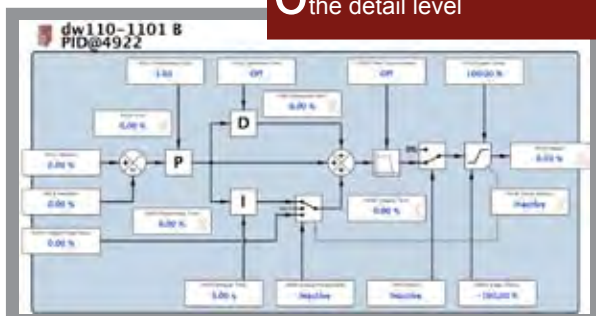


**4** Right click to open the selector menu & place a new Function Block

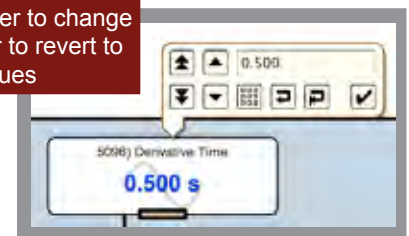
**5** Drag and drop to make connections



**6** Click on a Function Block to drill down to the detail level



**7** Click on a parameter to change its value or state or to revert to previous or default values



**SAVVY FEATURES  
SMART CONTROL  
SPEEDY SOLUTIONS**

Function Blocks are complete engineered system components. Their graphics are dynamic so that objects such as switches, indicators, etc., show their instantaneous state. A function block such as the PID above includes all the presets, resets, scaling, filters, clamps, etc., that you need for reliable implementation in the real world.

**savvy** navigation tools, object information and help features are both extensive and easy to use. With a few simple clicks you can build a system, set up a drive and document your work in a thoroughly professional manner - there is no equal!

# drive.web application packs

*smartys & speedys* pre-configured with engineered solutions for common applications. These generic packages come with a basic documentation set and include all the standard options needed to provide a reliable control scheme. They are easily edited to suit specific installations and can save many hours of program design and development time.

## WINDERS & UNWINDERS

*Open Loop Constant Tension Center Winder*

*Closed Loop Dancer Controller Center Winder*

*Closed Loop Loadcell Controller Center Winder*

These winder packages include such features as tension, taper, standstill mode, jog, diameter calculation, inertia and torque compensation, static and dynamic friction compensation, over/under wind, indexing, splicing and web break sensing.

Additional packages include slip core winders, surface winders and coilers.



## ELECTRONIC LINE SHAFT & REGISTRATION

The speed lock, phase lock and registration packages use dual encoders and event marker inputs to provide high speed shaft position control. When used with high performance drives accurate spindle orientation and print registration can be achieved.

## COORDINATED DRIVE LINE MASTER

Provides master linear or S-ramps with start, stop, jog, crawl logic and easy interface to drives, operator stations, pushbuttons or pots. The package includes the Process Control function block library with all the features you need to build complete coordinated drive systems with easy integration of the individual sections.

### *Other drive.web specials*

Please call us for other special packages. The flexibility, intuitive programming and self documenting features of the *drive.web* environment ensure easy adaptation to many common applications.

**drive.web**  
*inspired ideas*  
**innovative solutions**

**drive.web control technologies**

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