



# Durus\* Controllers

The strong and sturdy family of Durus Controllers integrates I/O, operator interface and control in one small package.

GE Intelligent Platforms' Durus Controller provides a rugged design and is filled with state-of-the-art features. It is built to take on the industrial environment with standard features like a built-in operator interface, a wide range of communications options, expansion slots, and a solid slide-and-snap mechanical interlock to expansion modules. Its rugged design and very competitive price allows users even more ability to meet their needs by complementing our existing line of controllers.



The Durus Controller can be programmed using both the built-in display and keypad or with the Durus Controls Software. The software provides convenient program creation and editing. Programs can be saved on a

computer and accessed at any time. They can also be uploaded from the controller and edited. The Durus Software provides a simulation mode that allows users to virtually run and test the program before it is loaded to the controller, eliminating mistakes before they ever make it to the plant floor or production environment.

### Key Features:

- 8 Amp relay outputs, isolated
- Discrete and analog expansion up to 44 I/O
- Support for Modbus Slave, Profibus® Slave, DeviceNet™ Slave and Ethernet Server
- Ability to use two different programming languages: ladder logic or function block diagram
- Memory module enables easy upgrades
- Replacement of up to 15 timers and counters in an application
- LCD backlit display for easy viewing in all environments

The Durus Controller is ideal for applications requiring less than 44 inputs and outputs such as vending machines, packaging lines, security and assembly where it could result in cost reduction by replacing timers and counters. It provides a real time clock for timing,

high voltage output for controlling situations such as street light control, and the built-in programmer and operator interface allow for easy field modifications. In addition, the Durus Controllers' rugged design allows for use in environments such as conveyor control and water level control where delicate controllers might fail.

### Software

Full featured Durus Software (IC646DUR001) enables users to develop applications in ladder logic or function block diagram programming. The Durus Software also comes with a powerful simulation tool that enables easy simulation of applications, and mimics the keystrokes on the built-in operator keypad.

The Durus provides a perfect complement to the GE Intelligent Platforms line of controllers; the VersaMax\* Micro Nano is ideal for applications where more memory and I/O are needed whereas the Durus is ideal for the simpler applications. The Durus Controller meets all global standards including UL and CE, as well as China RoHS.



# Durus\* Controllers

## Ordering Information

### AC Controllers

<b>IC210DAR012</b>	10 point (8) 24 VAC Inputs, (4) Isolated Relay Out (8 Amps), 24 VAC input power, supports expansion and display/keypad
<b>IC210DAR010</b>	10 point (6) AC Inputs, (4) Isolated Relay Out (8 Amps), AC input power, supports expansion and display/keypad
<b>IC210BAR010</b>	10 point (6) AC Inputs, (4) Isolated Relay Out (8 Amps), AC input power, supports expansion and no display/keypad
<b>IC210NAR010</b>	10 point (6) AC Inputs, (4) Isolated Relay Out (8 Amps), AC input power, no expansion, no plastic case and no display/keypad
<b>IC210DAR020</b>	20 point (12) AC Inputs, (8) Isolated Relay Out (8 Amps), AC input power, supports expansion and display/keypad
<b>IC210BAR020</b>	20 point (12) AC Inputs, (8) Isolated Relay Out (8 Amps), AC input power, supports expansion and no display/keypad
<b>IC210NAR020</b>	20 point (12) AC Inputs, (8) Isolated Relay Out (8 Amps), AC input power, no expansion and no display/keypad

### DC Controllers

<b>IC210DDR112</b>	10 point (6) 12VDC Inputs, (2) analog inputs <sup>1</sup> , (4) Isolated Relay Out (8 Amps), 12VDC input power, supports expansion and display/keypad
<b>IC210DDR012</b>	10 point (6) 24VDC Inputs, (2) analog inputs <sup>1</sup> , (4) Isolated Relay Out (8 Amps), 24VDC input power, supports expansion and display/keypad
<b>IC210BDR012</b>	10 point (6) 24VDC Inputs, (2) analog inputs <sup>1</sup> , (4) Isolated Relay Out (8 Amps), 24VDC input power, supports expansion, no display/keypad
<b>IC210NDR012</b>	10 point (6) 24VDC Inputs, (2) analog inputs <sup>1</sup> , (4) Isolated Relay Out (8 Amps), 24VDC input power, no expansion, no plastic case and no display/keypad
<b>IC210DDD012</b>	10 point (6) 24VDC Inputs, (4) 24VDC Out (Transistor 0.5 Amp), (2) analog inputs <sup>1</sup> , 24VDC input power, supports expansion and display/Keypad
<b>IC210BDD012</b>	10 point (6) 24VDC Inputs, (4) 24VDC Out (Transistor 0.5 Amp), (2) analog inputs <sup>1</sup> , 24VDC input power, supports expansion, no display/keypad
<b>IC210NDD012</b>	10 point (6) 24VDC Inputs, (4) 24VDC Out (Transistor 0.5 Amp), (2) analog inputs <sup>1</sup> , 24VDC input power, no expansion, no plastic case and no display/keypad
<b>IC210MDR124</b>	20 point with Modbus Slave communications built-in (8) 12VDC Inputs, (4) analog inputs <sup>1</sup> , (8) Isolated Relay Out (8 Amps), 12VDC input power, supports expansion and display/keypad
<b>IC210DDR024</b>	20 point (8) 24VDC Inputs, (4) analog inputs <sup>1</sup> , (8) Isolated Relay Out (8 Amps), 24VDC input power, supports expansion and display/keypad
<b>IC210BDR024</b>	20 point (8) 24VDC Inputs, (4) analog inputs <sup>1</sup> , (8) Isolated Relay Out (8 Amps), 24VDC input power, supports expansion, no display/keypad
<b>IC210NDR024</b>	20 point (8) 24VDC Inputs, (4) analog inputs <sup>1</sup> , (8) Isolated Relay Out (8 Amps), 24VDC input power, no expansion, no plastic case and no display/keypad
<b>IC210DDD024</b>	20 point (8) 24VDC Inputs, (8) 24VDC Out (Transistor 0.5 Amp), (4) analog inputs <sup>1</sup> , 24VDC input power, supports expansion and display/keypad
<b>IC210BDD024</b>	20 point (8) 24VDC Inputs, (8) 24VDC Out (Transistor 0.5 Amp), (4) analog inputs <sup>1</sup> , 24VDC input power, supports expansion, no display/keypad
<b>IC210NDD024</b>	20 point (8) 24VDC Inputs, (8) 24VDC Out (Transistor 0.5 Amp), (4) analog inputs <sup>1</sup> , 24VDC input power, no expansion, no plastic case and no display/keypad
<b>IC210MDR024</b>	20 point with Modbus Slave communications built in (8) 24VDC Inputs, (4) analog inputs <sup>1</sup> , (8) Isolated Relay Out (8 Amps), 24VDC input power, supports expansion and display/keypad
<b>IC210MDD024</b>	20 point Modbus Slave communications built in (8) 24VDC Inputs, (8) 24VDC Out (Transistor 0.5 Amp), (4) analog inputs <sup>1</sup> , 24VDC input power, supports expansion and display/keypad

<sup>1</sup>Analog inputs can be configured as DC input points.

### Discrete Expansion Units

<b>IC210EAR008</b>	8 point discrete expansion (4) AC Inputs, (4) Isolated Relay Out (8 Amps), AC input power
<b>IC210EAR208</b>	8 point discrete expansion (4) 24VAC Inputs, (4) Isolated Relay Out (8 Amps), AC input power
<b>IC210EDR008</b>	8 point discrete expansion (4) 24VDC Inputs, (4) Isolated Relay Output (8 Amps), 24VDC input power
<b>IC210EDD008</b>	8 point discrete expansion (4) 24VDC Inputs, (4) 24VDC Out (Transistor 0.5 Amp), 24VDC input power

### Analog Expansion Unit

<b>IC210EAI004</b>	4 point analog expansion (4) analog inputs (voltage and current, 10 bit), 12/24 VDC input power. Only one analog expansion supported on the Durus Controller
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### Communications Options

<b>IC210EMS001</b>	Modbus RTU slave communications expansion module, 24VDC power source
<b>IC210EPS001</b>	Profibus-DP slave communications expansion module, 24VDC power source
<b>IC210EDS001</b>	DeviceNet slave communications expansion module, 24VDC power source

### Software

<b>IC646DUR001</b>	Durus Software for ladder logic or Function Block diagram programming. Includes simulation tool.
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### Accessories and Cables

<b>IC210TMP001</b>	Durus Controllers FLASH Memory Pack that enables user to download application and upload application to Durus Controller
<b>IC210CBL001</b>	Durus Controller to PC RS-232 Serial Cable
<b>IC210CBL002</b>	Durus Controller to PDA Transfer Cable

### Programming and Trouble Shooting Tools

<b>IC646DUR001</b>	Durus Controllers Program and Simulation Software
<b>IC646DUR101</b>	Durus Controllers Program and Simulation Software and PC to Controller RS-232 Cable (IC646DUR001 and IC210CBL001)

### Starter Kits

<b>IC210TBX010</b>	IC210DAR010 10 point Durus Controller. AC Power Source, 6 AC in/4out (Relay 8 Amp), Expandable, with LCD/Keypad. Kit includes programming software and cable. (IC646DUR101)
<b>IC210TBX012</b>	IC210DDR012 12 point Durus Controller. 24 VDC Power Source, (6) 24 VDC in / (4) out (Relay 8 Amp), (2) analog inputs, Expandable, with LCD/Keypad. Kit includes programming software and cable. (IC646DUR101)
<b>IC210TBX020</b>	IC210DAR020 20 point Durus Controller. AC Power Source, (12) AC in/8 out (Relay, 8 Amp), Expandable, with LCD/Keypad. Kit includes programming software and cable. (IC646DUR101)
<b>IC210TBX024</b>	IC210DDR024 20 point Durus-20 Controller. 24 point 24 VDC Power Source, (8) 24 VDC in/8 out (Relay, 8 Amp), (4) analog inputs, Expandable, with LCD/Keypad. Kit includes programming software and cable. (IC646DUR101)
<b>IC210TBX124</b>	IC210MDR024 20 point Durus-20 Controller. 24 VDC Power Source, (8) 24 VDC in/8 out (Relay, 8 Amp), (4) analog inputs, Expandable, with LCD/Keypad. Support Modbus Slave on port. Kit includes programming software and cable. (IC646DUR101)

## GE Intelligent Platforms Contact Information

Americas: **1 800 433 2682** or **1 434 978 5100**

Global regional phone numbers are listed by location on our web site at [www.ge-ip.com/contact](http://www.ge-ip.com/contact)

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