

# EATON

# Cutler-Hammer

## Specific Control & Display Products

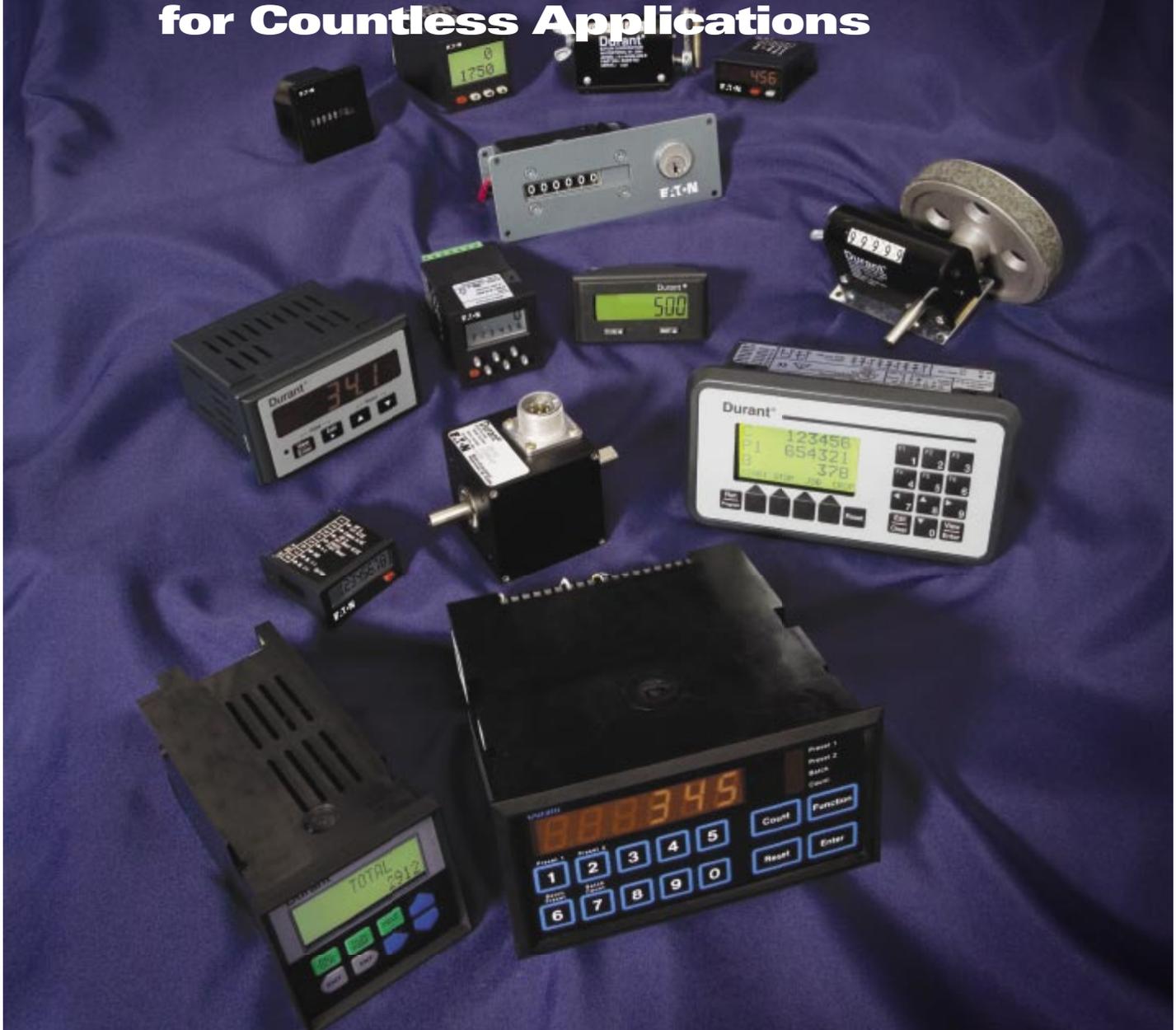
Product Focus

Monitoring, Measurement,  
Control & Display



# Get Specific.

## Single-Purpose Products for Countless Applications



**Eaton challenges you to Get Specific with innovative industrial control products that meet your exacting application requirements. With everything from relays and operator interface to motor control products, such as drives and soft starters, Eaton has the logic and power control products that keep your machinery and processes running efficiently and effectively.**

What are Specific Control & Display products? Simply put, they're the totalizers, timers, flow controllers, ratemeters, hour meters and count control products you use everyday to control single-purpose machinery and monitor process parameters in complex control schemes. These products are a perfect fit for processes where measurement needs to be controlled or

displayed—cut-to-length, flow measurement, parts counting and material handling applications, for example. Used as machine control in smaller applications, or as displays for specific parameters in larger, PLC-controlled equipment, Eaton's Specific Control & Display products are the answer to your monitoring, measurement, control and display needs.



**Totalizers**

Totalizers are the simplest and most common type of counter, used in a variety of applications where accurate totals are needed, including counting the number of parts produced, amount of material used, or the number of machine cycles occurring.

**Count Control**

Count control products provide output signals at preset count values. When signaling is needed for cut-to-length, batching, filling, mixing and dispensing applications, count control products offer the solution.

**Ratemeters**

Commonly included as a standard feature on totalizers and count control products, ratemeters are used where it is necessary to monitor the speed of a process. Conveyors, baking ovens, material flow and motor speed are characteristic of the types of processes in which ratemeters are applied.

**Choose the Right Product for Every Application.**

**Digital Panel Meters**

When your application calls for variable indication, Digital Panel Meters (DPM) are the right tool. Voltage, current, pressure, volume, temperature, frequency and other parameters can be monitored and displayed. With a variety of input and output options, DPMs can be used in most any application and the product's short depth makes it flexible and accommodating to panelbuilders' needs.

**Timers**

Timers are used in applications where time is the main focus. To make a process more efficient, effective or safe, timers are used to determine how long a machine has been running in order to schedule machine maintenance.

**Flow Totalizers & Control**

Flow products are used in a variety of applications where liquid or gas flow needs to be monitored or controlled. In many processes, both the total quantity of product being produced and the rate at which the product is being produced must be known; flow controllers can offer that information while monitoring your process efficiency.

**Integrated Machine Control**

As part of a robust package, integrated machine control products have high-speed count functions; including scaling, main counter, five presets, prewarn, totalizer, batch and rate. A flexible display with selectable character sizes, run screens, ladder triggered messages and a well-understood programming method allow flexibility in control functionality.



# Specific Products to Meet Your Specific Goals



## A History of Innovation and Reliability

Dependable and innovative Durant® industrial control solutions have been in the global marketplace since 1879. More than a century ago, Durant products led the marketplace in the development and application of mechanical counters for use in flour production. The Durant counter quickly became the industry standard.

Today, Eaton manufactures the same Durant products that catapulted counters into the industrial marketplace, and continues to aggressively grow

the product line, offering OEMs, panel-builders and users the most technologically advanced control, measurement, monitoring and display products, under both the Durant and Eaton brands, to meet a broad range of application requirements.

Combined with a history of innovation is a commitment to quality, reliable products. The manufacturing facility for Eaton's Specific Control & Display products is ISO 9001 and ISO 14000 certified and committed to

leading-edge manufacturing processes such as just-in-time, statistical process control and continuous flow. Quality, precision, trouble-free performance, durability, and ease-of-operation are the goals the product line and the manufacturing processes are measured against.

For your specific application, choose the brand whose history reinforces a dedication to innovation and quality unmatched in the industry.





## Customize Your Product For Your Application

Many OEMs require a specific set of control options to run single-purpose machinery. Eaton's Specific Control & Display products are the perfect place to start building a customized control package. Because your application is unique, and your control platform must be flexible to accommodate changes in application or data requirements, much of the standard product offering is built for easy customization. With easy-to-program software and selectable output parameters, Eaton's Specific Control & Display products become the control products you need them to be.

If the standard product doesn't meet your unique application needs, Eaton is committed to finding a solution. This is made easy as the many knowledgeable engineering and technical support engineers understand the intricacies of using products in the field. They are committed to answering questions and creating custom programs to meet the demands of your machinery.

In addition to application focused engineering resources, Eaton will not only modify product software or firmware to account for varying application requirements, but also has the capability to

manufacture a custom printed circuit board assembly. These custom printed circuit boards would be manufactured with your unique application in mind, making it the perfect solution for your specific-purpose machinery.

It's all about making products to meet your needs. Eaton offers you the choice of flexible products, built for customized programming, or modified products built to your specifications. A true business partner designs application specific solutions. No one does that better than Eaton.

## Complete Control Solutions

Having to use multiple sources for control products can be difficult. With different shipping schedules, programming interfaces and technical support teams, running your machinery at peak performance can at times be a challenge.

Offering a complete line of feature-rich motor and logic control solutions is Eaton's way of demonstrating that it cares about your entire control system, from protection and control to wiring, termination and display. The purpose is to manage and provide the portfolio of products

you need to keep your processes running efficiently and effectively.

If your application calls for a variety of control and display products, remember that Eaton offers a broad range of products to meet almost any specification. You'll get the product you need, when you need it and have a single-source of support with application engineers who know the industry.

When you're looking for a supplier you can trust, whose broad product offering will meet your machinery control needs, turn to Eaton.



**Product Family**

			
<b>E5-024-C</b>	<b>E5-224-C</b>	<b>E5-x24-E</b>	<b>E5-148-C</b>
<b>Totalizer</b>	<b>Timer</b>	<b>Panel Meter / Totalizer / Ratemeter / Timer</b>	<b>Count Control/Preset Counter</b>
<ul style="list-style-type: none"> <li>• Non-replaceable battery (min. 8-yr. life)</li> <li>• Compact, low cost and high efficiency</li> <li>• 8-digit LCD totalizers</li> <li>• Manual or electrical reset</li> <li>• Various counting modes/ inputs</li> </ul>	<ul style="list-style-type: none"> <li>• Non-replaceable battery (min. 8-yr. life)</li> <li>• Compact, low cost and high efficiency</li> <li>• 8-digit LCD timer</li> <li>• Manual or electrical reset</li> <li>• Various timing modes (hr / min / sec)</li> </ul>	<ul style="list-style-type: none"> <li>• Compact device with bright, LED display</li> <li>• Multiple functions available: count, time, rate, multi-function, double-function, process indication</li> <li>• 24V dc power</li> </ul>	<ul style="list-style-type: none"> <li>• Low cost, simple count control</li> <li>• Various power options: battery, ac, dc</li> <li>• Easy-to-change preset values</li> <li>• 2-line display: input and preset values</li> </ul>
<b>Typical Applications</b>			
<ul style="list-style-type: none"> <li>• Replacement for mechanical counters</li> <li>• Transaction counting</li> <li>• Parts counting</li> <li>• Position indication or measurement</li> </ul>	<ul style="list-style-type: none"> <li>• Test equipment</li> <li>• Small machine run-time indication</li> <li>• Timing applications where no power supply is available</li> </ul>	<ul style="list-style-type: none"> <li>• Count, measure, time where small package &amp; easy-to-read display required</li> <li>• Position display</li> <li>• Motor / pulley rpm</li> </ul>	<ul style="list-style-type: none"> <li>• Cut-to-length machinery</li> <li>• Parts batching / palletizing</li> <li>• Die press positioning control</li> </ul>
<b>Panel Cutout</b>			
22 X 44 mm (0.870 X 1.772 in.) (1/32 DIN)	22 X 44 mm (0.870 X 1.772 in.) (1/32 DIN)	22 X 44 mm (0.870 X 1.772 in.) (1/32 DIN)	45 X 45 mm (1.772 X 1.772 in.) (1/16 DIN)

**Product Family**

			
<b>Eclipse</b>	<b>Ambassador</b>	<b>President</b>	<b>Fusion</b>
<b>Totalizer/Ratemeter/Count Control/Panel Meter</b>	<b>Count Control/Preset Counter</b>	<b>Count Control/Preset Counter</b>	<b>Integrated Machine Control</b>
<ul style="list-style-type: none"> <li>• Super bright LED display</li> <li>• Multiple models available: totalizers, ratemeters, count controls, digital panel meters &amp; flow controls</li> </ul>	<ul style="list-style-type: none"> <li>• 6-digit, high-visibility, 2-line LCD display</li> <li>• User-configurable control inputs</li> <li>• Highly flexible control / display</li> </ul>	<ul style="list-style-type: none"> <li>• Bright LED display with 14mm characters</li> <li>• Simple configuration with 14-button tactile keypad</li> <li>• Many different versions fit almost any application</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated controller combines operator interface, ladder logic, &amp; high-speed counting</li> </ul>
<b>Typical Applications</b>			
<ul style="list-style-type: none"> <li>• Length measurement &amp; control</li> <li>• Flow monitoring &amp; control</li> <li>• Process monitoring &amp; display</li> <li>• Voltage &amp; current monitoring and display</li> </ul>	<ul style="list-style-type: none"> <li>• Flow control where simultaneous total &amp; rate display is required</li> <li>• Cut-to-length and other simple processes where flexibility of inputs / outputs required</li> </ul>	<ul style="list-style-type: none"> <li>• Cut-to-length machinery with batching</li> <li>• Parts batching / palletizing</li> <li>• Die press positioning control</li> <li>• Applications where parameter changes are required</li> </ul>	<ul style="list-style-type: none"> <li>• Cut-to-length, flow control, parts batching and other applications where logic is required</li> <li>• Combines multiple machine monitoring devices into one (hour meters, parts count, process parameters, etc.)</li> </ul>
<b>Panel Cutout</b>			
45 X 92 mm (1.772 X 1.622 in.) (1/8 DIN)	68 X 68 mm (2.667 X 2.667 in.)	68 X 138 mm (2.667 X 5.433 in.)	68 X 138 mm (2.667 X 5.433 in.)

Product Family		
		
<b>E5-248-C</b>	<b>E5-496-E</b>	<b>Courier</b>
<b>Count Control</b>	<b>Totalizer/Ratemeter/Timer</b>	<b>Totalizer/Ratemeter</b>
<ul style="list-style-type: none"> <li>Panel-mount, battery powered time relay</li> <li>8 timing modes, 9 time ranges</li> <li>3 programmable activation modes</li> <li>8A relay contacts (n.O. Or n.C)</li> </ul>	<ul style="list-style-type: none"> <li>Economical, multi-function display</li> <li>Large, LED characters</li> <li>Ac or dc power options</li> </ul>	<ul style="list-style-type: none"> <li>Replaceable lithium battery</li> <li>8-digit, high-visibility LCD display</li> <li>Optional backlighting</li> <li>Various input options available</li> </ul>
<b>Typical Applications</b>		
<ul style="list-style-type: none"> <li>Time relay applications where no external voltage supply is available and/or programming required from front panel</li> </ul>	<ul style="list-style-type: none"> <li>Count, measure, time where large, easy-to-read display required</li> <li>Position display</li> <li>Motor / pulley rpm</li> </ul>	<ul style="list-style-type: none"> <li>Portable/mobile/remote flow monitoring (e.g. Sewer pumping, pesticide application)</li> <li>Position display, rpm</li> <li>Length measurement (e.g. Carpet, cable)</li> </ul>
<b>Panel Cutout</b>		
45 X 45 mm (1.772 X 1.772 in.) (1/16 DIN)	45 X 92 mm (1.772 X 1.622 in.) (1/8 DIN)	33 X 68 mm (1.299 X 2.677 in.)

Product Family		
		
<b>Hour meters</b>	<b>Electromechanical</b>	<b>Mechanical</b>
<b>Timer</b>	<b>Totalizer</b>	<b>Totalizer</b>
<ul style="list-style-type: none"> <li>Compact, low-cost LCD &amp; electromechanical elapsed time meters</li> <li>Various power options for almost any power supply</li> </ul>	<ul style="list-style-type: none"> <li>Various price, voltage and size ranges for different duty cycles and environments</li> <li>Long life and always readable display</li> </ul>	<ul style="list-style-type: none"> <li>Various size ranges for different duty cycles and environments</li> <li>No power supply needed</li> <li>Long life and always readable display</li> </ul>
<b>Typical Applications</b>		
<ul style="list-style-type: none"> <li>Construction / agricultural equipment</li> <li>Compressors, generators and pumps</li> <li>Rental equipment</li> <li>Any application where a run-time display is required</li> </ul>	<ul style="list-style-type: none"> <li>Coin-operated equipment</li> <li>Gaming machines</li> <li>Printing presses</li> <li>Secondary machines (e.g. punch press)</li> </ul>	<ul style="list-style-type: none"> <li>Winding &amp; spooling equipment</li> <li>Position display</li> <li>Mechanical piece / cycle counting</li> </ul>
<b>Panel Cutout</b>		
Various	Various mounting configurations	Various mounting configurations

**Eaton's electrical business is a global leader in electrical control, power distribution, uninterruptible power supply and industrial automation products and services. Eaton's global electrical brands, including Cutler-Hammer®, Powerware®, Holec® and MEM®, provide customer-driven PowerChain Management™ solutions to serve the power system needs of the industrial, institutional, government, utility, commercial, residential, IT, mission critical and OEM markets worldwide.**

**Eaton Corporation is a diversified industrial manufacturer with 2006 sales of \$12.4 billion. Eaton is a global leader in electrical systems and components for power quality, distribution and control; fluid power systems and services for industrial, mobile and aircraft equipment; intelligent truck drivetrain systems for safety and fuel economy; and automotive engine air management systems, powertrain solutions and specialty controls for performance, fuel economy and safety. Eaton has 60,000 employees and sells products to customers in more than 125 countries. For more information, visit [www.eaton.com](http://www.eaton.com).**

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**Cutler-Hammer**

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