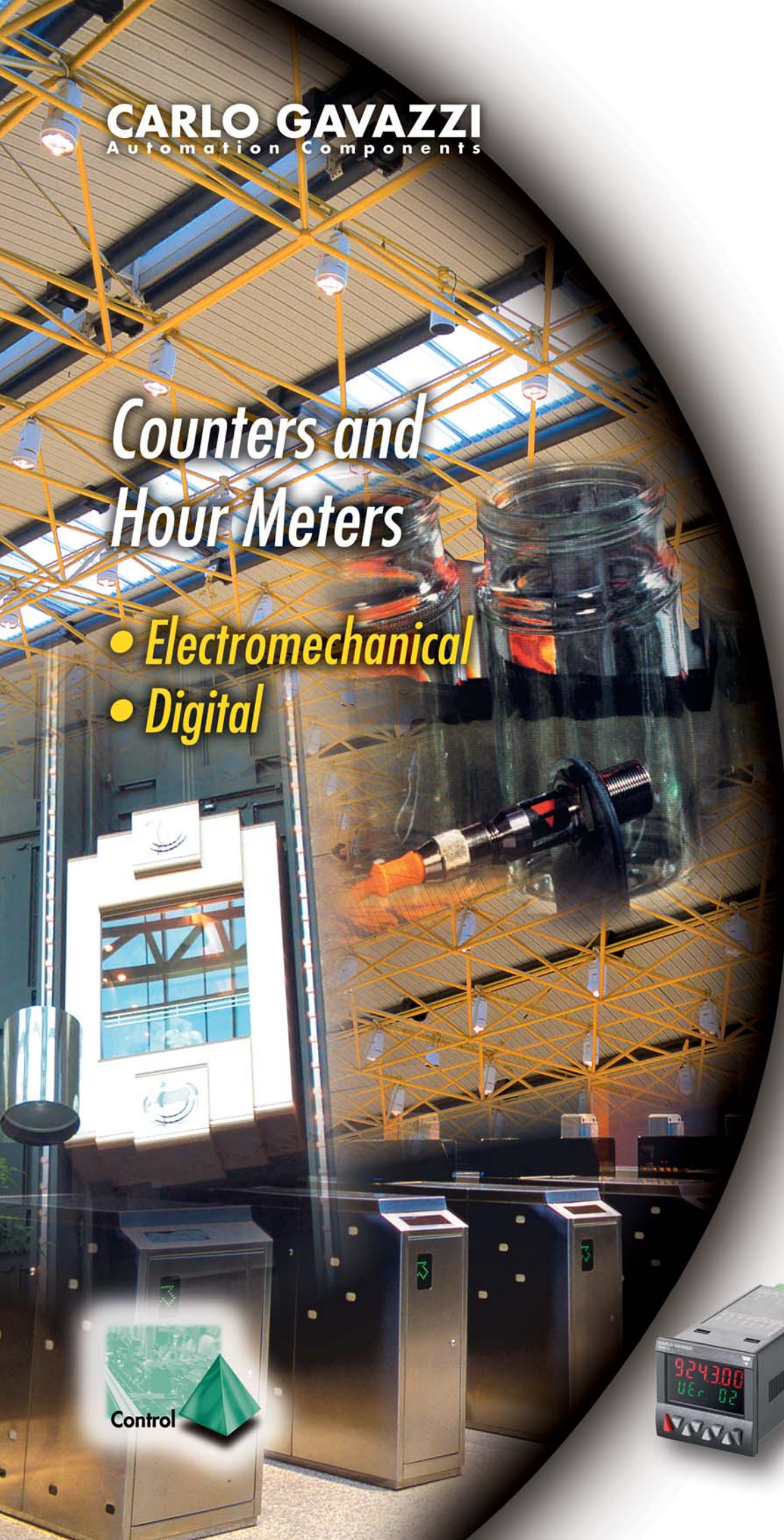


Counters and Hour Meters

- Electromechanical
- Digital





Counters

CARLO GAVAZZI presents the range of Instruments dedicated to counting and measuring. Electromechanical types are suitable for applications where high reliability, durability and economy are required. The Digital types are extremely versatile and offer the possibility of measuring and or counting at higher speed and to configure the instrument according to own specific needs.

Electromechanical can be used for pulse counting or as hour meters, the digital ones offer pulse counting, time, speed or frequency measuring. In connection to our encoders they can also be used as position indicators.



Space Optimization



Diagnostic Warning



User Friendly



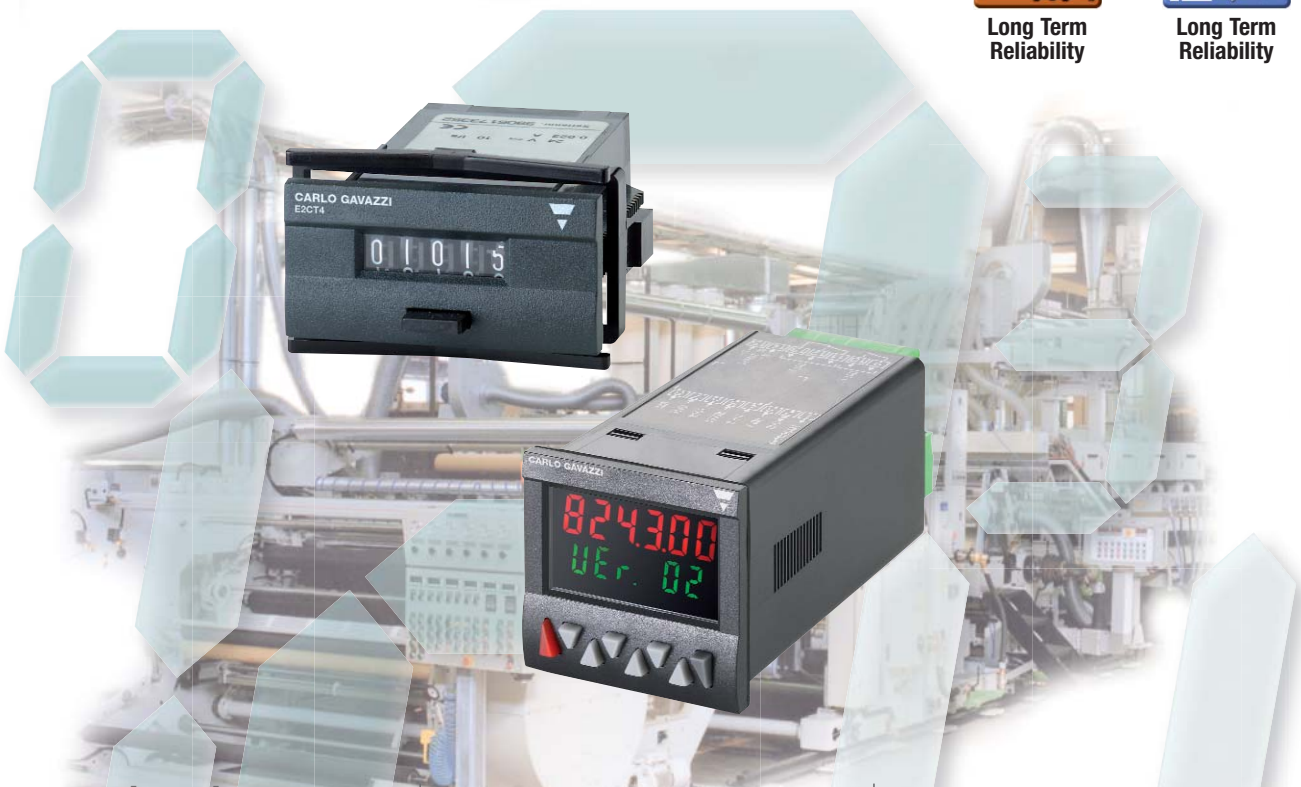
Minimizing Energy Cost



Long Term Reliability



Long Term Reliability



Universal Supply

The electromechanical types are available with a wide selection of operating voltages both DC and AC. The Digital ones can be lithium battery operated, have universal supply voltage, and some others need to be chosen with DC or AC input, according to the requirements.

Presets

Electromechanical devices have no presets. On most of digital devices one or more presets can be programmed in order to be able to provide external indication of the reached value and to stop or reset the cycle.

Outputs

Preset instruments are equipped with one or more relays or optocoupler outputs. The output signal can transform the instrument into an actuator if used to manage external controllers such as for instance PLC's

LCD display with LED look

DMF61 and DMF62 are available with the LED look LCD display. They combine the low power consumption of the LCD displays together with the good visibility of LED ones.

Accessories

All instruments are designed to be installed in different panel cut outs. They are delivered with different adapters or they are provided as accessories.

Approvals and Warranty

All devices are CE and 2002/95EC (RoHS) compliant. Some, please refer to detailed instruments description, are also cURus approved.



Sense



Switch



Control



Safety



Fieldbus



Electromechanical Counter



EMCT46
ELECTROMECHANICAL MICRO COUNTER
Various enclosures shapes
 Panel or PCB mounting
6 Magnified figures
AC and DC supplies
Low power consumption
No reset
Long life service
IP66
Approvals: cURus, CE, RoHS



EMCT47
ELECTROMECHANICAL MICRO COUNTER
Various enclosures shapes
 Panel or PCB mounting
7 Magnified figures
AC and DC supplies
Low power consumption
No reset
Long life service
IP66
Approvals: cURus, CE, RoHS



E2CT4
ELECTROMECHANICAL COUNTER
Various enclosures shapes
 Panel or PCB mounting, Also available DIN 24 x 48
6 or 7 figures
AC and DC supplies
With mechanical reset button
Long life service
IP41
Approvals: CE, RoHS



E1CT4
ELECTROMECHANICAL COUNTER
Various enclosures shapes
 Panel or PCB mounting, also available, DIN 24 x 48
6 or 7 figures
AC and DC supplies
No reset
Long life service
IP41
Approvals: CE, RoHS

Electromechanical Counter/Hour Meter



ECH4
ELECTROMECHANICAL DOUBLE FUNCTION
 Hour meter and pulse counter
2 separate indicators
 7 or 8 magnified figures
AC and DC versions
Single or double input
48 x 48 panel mounting
Long Life service
IP52
Approvals: cURus, CE, RoHS

Counters

Electromechanical Hour Meter



E1HM35
ELECTROMECHANICAL HOUR METER
7digits: 99999,99h
Tamper proof (without reset)
AC and DC supply available
DC version with Quartz
High shock and impact resistance
IP65 (front side)
DIN mounting
 (2 modules wide)
Approvals CE, RoHS



E2HM35
ELECTROMECHANICAL HOUR METER
 Suitable for vehicles
6digits: (99999,9h)
 Magnified figures
Tamper proof (without reset)
AC and DC supply available
Quartz Driven: 0,02% accuracy
High shock and impact resistance
IP 65
Approvals CE, RoHS



E1HM4
MICRO ELECTROMECHANICAL HOUR METER
 Various enclosure shapes
 Also available DIN 24 x 48
7 figures AC (99999.99h)
8 figures DC (999999.99h)
 Magnified figures
No reset
AC and DC supply available
IP65
Approvals: cURus, CE, RoHS



E2HM4
ELECTROMECHANICAL HOUR METER
48 x 48 panel mounting
 DIN Rail adapter available
7 figures AC (99999.99h)
8 figures DC (999999.99h)
 Magnified figures
No reset
AC and DC supply available
IP52 (IP65 optional)
Approvals: cURus, CE, RoHS

Digital Counter



DCT86
PULSE COUNTER
Single Channel adding: <60Khz can be dumped to 30Hz NPN or PNP
Programmable decimal point: Decimal point can be programmed from 0.0 to 0.000.
DIN 24 x 48
LED display: Very bright red LED display
Fast start up: After 16ms device starts counting
Big keys: big rubber keys can be operated also with gloves
Reset function: mechanical, electrical, protected by lock
10 - 30VDC supply
IP65
Temperature Range: -10...+50°C
Approvals: cURus, CE, RoHS



DCT2
PRESET PULSE COUNTER
Single channel up / down
programmable decimal point: Decimal point can be programmed from 0,0 to 0,000
6 Presets
DIN 48 x 48
2 lines LCD display
Output relay
Universal Input: 12 to 250Vac/dc
Configurable NO or NC
Reset and keypad lock inputs
Battery operated: Long life lithium battery 8years guaranteed operation
IP65
Temperature Range: -10...+50°C
Approvals: cURus, CE, RoHS



FKA
PULSE COUNTER
Single channel up / down: Selectable by input Fast or slow counting 7 or 12Khz Fast or 30Hz Slow
DIN 24 X 48
Single line LCD Display
 8 digits from -9999999 to 99999999
Optional Backlighting
DC or AC input models
Front key lock
Battery operated: Long life lithium battery 8years guaranteed operation
IP65
Temperature Range: -10...+60°C
Approvals: cURus, CE, RoHS

Digital Multifunction



DMF861
Multifunction display: Pulse counter, position display, frequency, timer
6Digits 8mm LED display: 4 different counting modes
2 inputs: A and B channels
High Rate Accuracy system: Up to 60kHz
EEPROM data backup
DIN 24 x 48
DC supply: With reverse polarity protection
IP65
Robust design housing
Approvals: cURus, CE, RoHS



DMF862
Multifunction display with Dual reading
 Pulse counter, position display, frequency, timer
2 values are displayed simultaneously
6Digits 8mm LED display: 4 different counting modes
2 inputs: A and B channels
High Rate Accuracy system: Up to 60kHz
EEPROM data backup
DIN 24 x 48
DC supply: With reverse polarity protection
IP65
Robust design housing
Approvals: cURus, CE, RoHS



DMF1461
Multifunction display: Pulse counter, position display, frequency, timer
6Digits 8mm LED display: 4 different counting modes
2 inputs: A and B channels
High Rate Accuracy system: Up to 60kHz
EEPROM data backup
DIN 48 x 96
DC supply: With reverse polarity protection
IP65
Robust design housing
Approvals: cURus, CE, RoHS

Digital Hour Meter



FSA01
HOUR METER
8Digits LCD display:
 From 00000-00 to 99999-59
 Or 00000-00 to 99999-99
Accumulated time always displayed
Optional backlighting
0.1s synchronisation
High Accuracy: 100ppm
NPN or PNP available
DIN 24 X 48
DC or AC input models
Front key lock
Battery operated: Long life lithium battery 8years guaranteed operation
IP65
Approvals: cURus, CE, RoHS



FSA02
HOUR METER
8 Digits LCD display:
 From 0000.00.00 to 9999.99.59
 Or 0000000.0 to 9999999.9
Accumulated time always displayed
Optional backlighting
0.1s synchronisation
High Accuracy: 100ppm
NPN or PNP available
DIN 24 X 48
DC or AC input models
Front key lock
Battery operated: Long life lithium battery 8years guaranteed operation
IP65
Approvals: cURus, CE, RoHS

Digital Timer



FMC01
TIME RELAY
8 Programmable functions:
 ON delay, OFF delay, One shot and Single shot.
9 programmable ranges:
 From 0.2s to 99 999h
6 front selection keys
2 lines LCD display
DIN 48 x 48
Output relay: Configurable NO or NC
Start and reset Inputs:
 Universal voltage input
Front key lock
Battery operated: Long life lithium battery 8years guaranteed operation
IP65
Approvals: CE, RoHS



DMF 1462
Multifunction display with Dual reading
 Pulse counter, position display, frequency, timer
2 values are displayed simultaneously
6Digits 8mm LED display: 4 different counting modes
2 inputs: A and B channels
High Rate Accuracy system: Up to 60kHz
EEPROM data backup
DIN 48 x 96
DC supply: With reverse polarity protection
IP65
Robust design housing Approvals: cURus, CE, RoHS



FKC01
Multifunction preset counter
 Counter, tachometer and timer
 Max counting Frequency 30kHz
2 channels counting input
1 preset value
Multi Purpose Input
2 lines x 6 digits LCD display
1 Relay output
AC or DC supply
EEPROM data retention
DIN 48 x 48
IP65
Approvals: cURus, CE, RoHS



DMF61
Multifunction preset counter
 Counter, tachometer and timer
 Max counting Frequency 60kHz
1 preset value
Multi Purpose Input
2 lines LCD display, also available LED look, optional backlighting
2 Relay outputs
AC or DC supply
EEPROM data retention
DIN 48 x 48
IP65
Approvals: cURus, CE, RoHS



DMF62
Multifunction preset counter
 Counter, tachometer and timer
 Max counting Frequency 60kHz
2 preset value
Multi Purpose Input
2 lines LCD display, also available LED look, optional backlighting
2 Relay outputs or optocouplers
AC or DC supply
EEPROM data retention
DIN 48 x 48
IP65
Approvals: cURus, CE, RoHS

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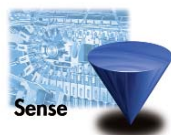
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CARLO GAVAZZI
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