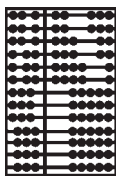# 520K-530K

Pulse Counters, Position Displays, Rate Meters, Time Meters & Combinations

New Family: Your choice for your application!

Features

- LED display with very high luminosity

- 0.315" (8mm) digit height

- 6 digit display

- DIN housing, 1.88"x.944" (48x24mm)

- Easy 2 button programming

- Connection with screw terminal

- IP65 NEMA 4X (front)

- NEMA 4X Wall Mount Enclosure (optional)

- Input pulse-shape variable (Schmitt Trigger characteristics)

520K	521K	522K	523K	524K
Simple Display Counter	**Totalizer and Postion indicator**	**Frequency meter and Tachometer**	**Time meter**	**Multipurpose device**

520K — Simple Display Counter

- Display range 0..999999 with leading zero blanking
- Overflow condition will be indicated by displaying the count value without leading zero blanking
- Count frequency up to 10kHz (can be damped to 30Hz in setup)
- SET-key resets the counter to zero (can be disabled in setup)
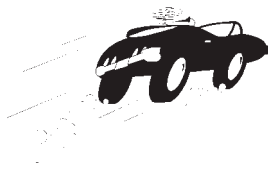- 1 count input
- 1 reset input

Order #: 520K.2

521K — Totalizer and Postion indicator

- Display range -199999..0..999999 with leading zero blanking
- Overflow condition will be indicated by 1Hz flashing of display
- Count frequency up to 10kHz (can be damped to 30Hz in setup)
- SET-key resets the counter to zero (or selected preset number)
- 2 count inputs
- 1 reset input
- Multiplying factor (0.00001...99.9999)
- Option: optocoupler output if count value ≤ 0
- Counting with direction input, differential counting, counting with phase discriminator (also with pulse doubling)

Order #:
521K.1 w/optocoupler
521K.2 w/out optocoupler

522K — Frequency meter and Tachometer

- Display range 0..999999 with leading zero blanking
- Indicates rate per sec or min (1/Tau) to 0.1% accuracy
- Overflow condition will be indicated by 1Hz flashing of display
- Input frequency up to 10kHz (can be damped to 30Hz in setup)
- 1 count input
- Operating principle: period duration measurement (average value at higher frequencies)
- Option: optocoupler output if frequency f=0 (e.g. no operation indicator)
- Multiplying factor (0.00001...99.9999)

Order #:
522K.1w/optocoupler
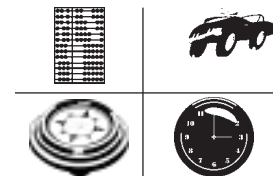**522K.2 w/out optocoupler**

523K — Time meter

- Display range 0..999999 with leading zero blanking to 0.03% accuracy
- Lowest digit's decimal point flashes when timing
- Timing in s, min, h or h.min.s (programmable) Timing resolution x1, .1, .01, .001, fixed by selected decimal point
- SET-key resets the counter to zero
- Gate, start and stop via 2 inputs (progammable)
- 1 reset input
- Operation mode: Precise timing from hours to 1/1000 sec
- Option: optocoupler output (e.g. Timing indicator, 0.5 sec On/Off)

Order #:
523K.1 w/optocoupler
523K.2 w/out optocoupler

524K — Multipurpose device

- 521K-523K in just one device
- Operation mode can be programmed

Order #:
524K.1 w/optocoupler
524K.2 w/out optocoupler

525K	**526K**	**527K**	**528K**	**529K/530K**
Adding Counter and Tachometer	2 Display Counters	Display Counter and Time meter	2 Time meters	Analog Displays

525K — Adding Counter and Tachometer

- Display range 0..999999 with leading zero blanking
- Overflow condition will be indicated by 1 Hz flashing of rate value and leading zeros of totalizer
- Count frequency up to 10kHz
- Indicates rate / sec or min (1/Tau)
- SET-key resets the counter to zero (can be disabled in the setup)
- Key to switch rate / total display
- 1 count input
- 1 reset input
- Seperate multiplying factors for totalizer & ratemeter (0.00001...99.9999)
- Operating mode: Rate meter: 1/Tau (average value at higher frequencies)

Order #: 525K.2

526K — 2 Display Counters

- Display range 0..999999 with leading zero blanking
- Overflow indicated by the leading zeros
- Count frequency up to 10kHz
- SET-key resets the counter to zero (can be disabled in setup for each counter seperately)
- Push-button for switching between counter 1 and counter 2
- 1 count input
- 1 reset input (program-mable for each counter seperately in setup)
- One multiplying factor (0.00001...99.9999)

Order #: 526K.2

527K — Display Counter and Time meter

- Display range 0..999999 with leading zero blanking (Overflow shows leading zeros)
- Lowest digit's decimal flashes when timing
- Adding counter: Decimal point only optical function
- Hour meter: Timing in s, min, h or h.min.s (programmable) Decimal point fixes the resolution
- SET-key resets the counter to zero (can be seperately disabled in the setup for each channel)
- Push-button switches adding counter / time meter
- Count frequency up to 10kHz
- 1 count input
- Gate, start and stop via 1 input (progammable)
- 1 reset input (can be disabled in setup)
- Multiplying factor (0.00001...99.9999)

Order #: 527K.2

528K — 2 Time meters

- Display range 0..999999 with leading zero blanking
- Active timing will be indicated by flashing the lowest digit's decimal point (one control)
- Timing in s, min, h or h.min.s (programmable) Decimal point fixes the resolution (ex: 1, 0.1, 0.01, 0.001)
- SET-key resets the counter to zero (can be disabled in the setup)
- Push-button for switching between time meter 1 and 2
- Gate, start and stop via 2 inputs (progammable)
- 1 reset input (program-mable for each timer seperately in setup)

Order #: 528K.2

529K/530K — Analog Displays

- Display range -19999..0..99999 with leading zero blanking
- Resolution 14 bit
- 5 digit display 6 digit total display (530K)
- 4 different resolutions (0..20mA; 4..20mA; 0..10V or 2..10V)
- Scaling factor for displayed value
- Automatic storage of maximum and minimum value (can be disabled in setup)
- Input to activate storing of displayed value

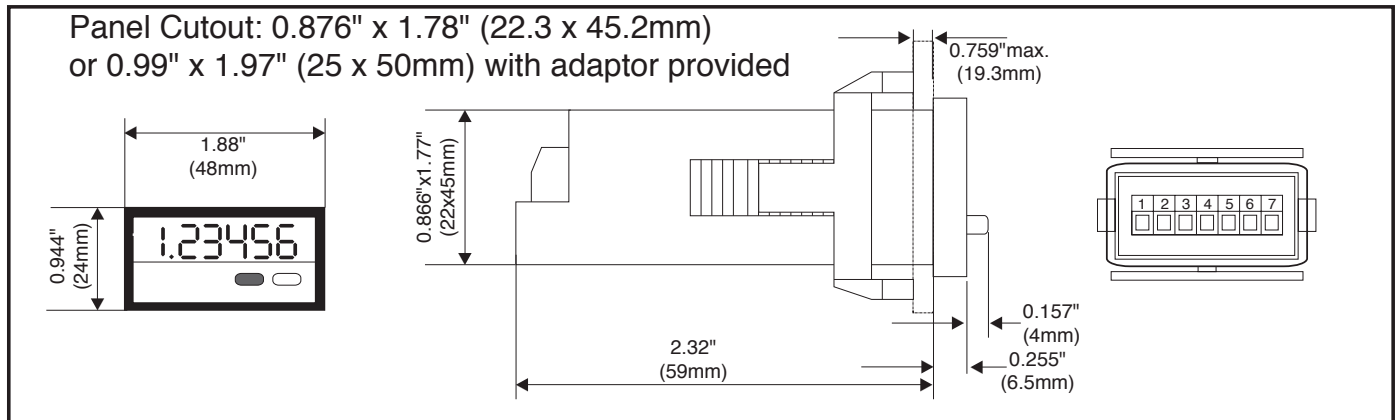**Order #:**
529K.2 = Rate Display Only
530K.2 = Rate and Total Display

Electrical characteristics:

- Supply Voltage: 10 to 30 VDC
- Data retention: EEPROM (1 million cycles or 10 years)
- Noise immunity acc. to EN 50081-2; EN55011 class B; EN 50082-2
- Ambient temperature: 14°F to 122°F (-10°C to +50°C)
- Input   sensitivity: Low: 0 to 1 VDC High: 4 to 30 VDC
- Input resistance: 10 k ohm
- Polarity of inputs: programmable for all inputs in common
- Optocoupler: Max 30VDC, 10 mA, 1V drop @ 10 mA

520K Series Dimensions

Panel Mount (standard):

Panel Cutout: 0.876" x 1.78" (22.3 x 45.2mm)
or 0.99" x 1.97" (25 x 50mm) with adaptor provided

1.88"
(48mm)

0.944"
(24mm)

1.23456

0.866"x1.77"
(22x45mm)

0.759"max.
(19.3mm)

0.157"
(4mm)

0.255"
(6.5mm)

2.32"
(59mm)

1 2 3 4 5 6 7

Wall Mount (optional):

FRONT VIEW

5.033

0.886REF.

0.443 REF.

0.886

3.064

1.081

1.622

1.771

1.771" X .886"
CUT-OUT WITH
.0625" RADIUS

RIGHT SIDE VIEW

2.721

INSIDE DEPTH

FRONT VIEW COVER REMOVED

4.686

4.210

2.243 2.718

END VIEW

2.525

3.021

0.986

Ø0.600

4.935