$\square$ Features

- Widely used in Machinery/Electronic/Food/Package industry for counting,length,batch counting. no./length value presetable. When for batch counting,Accumulate counte value/current batch count value $\&$ batch no. will displays at the same time.Several outputs settable.
© Accuracy: $0.01 \%$, dual line $4 / 6 / 8$ digit display.Resolution 0.0001 . Photo isolation for input $\&$ output,Strong interference
- Input: 4 modes (add counting, substract counting, add \& substract counting, phase
difference input for various waveform pulse/raster, proximity switch/ difference input for various waveform pulse/raster/proximity switc
photoelectrical switch/contact swith/encoder( PNP/NPN) etc.)
- Output: 8 modes.Up to 3 alarm outputs with various control modes for selection
- Communication:standard RS232/RS485 interface,MODBUS RTU protocol,
realize remote control by direct connection with PC/PLC/other equipment.
$\square$ Code Illustration

| Model |  |  |  |  |  |  |  |  |  | Descripion | Remark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FH | $\square$ | $\square$ | - - | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | Batch/Length/Angle/Position Controller |  |
| Dimension | 4 |  |  |  |  |  |  |  |  | $48 \mathrm{~W}^{*} 48 \mathrm{H}^{*} 80 \mathrm{Lmm}$ |  |
|  | 7 |  |  |  |  |  |  |  |  | $72 \mathrm{~W}^{*} 72 \mathrm{H}^{*} 100 \mathrm{Lmm}$ |  |
|  | 8 |  |  |  |  |  |  |  |  | $96 \mathrm{~W}^{*} 48 \mathrm{H} * 80 \mathrm{Lmm}$ |  |
| Power |  | Blank |  |  |  |  |  |  |  | 90-260V AC/DC |  |
|  |  | E |  |  |  |  |  |  |  | 18-30V AC/DC ( DC 24 V ) |  |
| Digit display |  |  | 4 |  |  |  |  |  |  | 4 digits |  |
|  |  |  | 6 |  |  |  |  |  |  | 6 digits |  |
|  |  |  | 8 |  |  |  |  |  |  | 8 digits |  |
| Function selection |  |  |  | c |  |  |  |  |  | Count, Length |  |
|  |  |  |  | B |  |  |  |  |  | Batch counting |  |
|  |  |  |  | P |  |  |  |  |  | Postion control |  |
| AL 1 |  |  |  |  | N |  |  |  |  | None |  |
|  |  |  |  |  | R |  |  |  |  | Relay |  |
|  |  |  |  |  | S |  |  |  |  | SSR |  |
| AL 2 |  |  |  |  |  | N |  |  |  | None |  |
|  |  |  |  |  |  | R |  |  |  | Relay |  |
|  |  |  |  |  |  | S |  |  |  | SSR |  |
| Communication |  |  |  |  |  |  | Blank |  |  | None |  |
|  |  |  |  |  |  |  | 2 |  |  | RS232 |  |
|  |  |  |  |  |  |  | 4 |  |  | RS485 |  |
| Auxiliary Power |  |  |  |  |  |  |  | A |  | +12V/40mA |  |
|  |  |  |  |  |  |  |  | B |  | $+24 \mathrm{~V} / 30 \mathrm{~mA}$ |  |
|  |  |  |  |  |  |  |  | C |  | Others: eg.5V DC |  |
| Input |  |  |  |  |  |  |  |  | Blank | 2 pulse inputs, encoder to work with |  |
|  |  |  |  |  |  |  |  |  | 1 | INA 1 input,switch sensor to work with |  |

$\square$ Specifications

| Power Supply | 90-260V AC/DC or 12-30V AC/DC Power consumption: $\leqslant 5 \mathrm{VA}$ |
| :---: | :---: |
| Input signal | Pulse Signal,Square Wave, Sine-Wave $5 \mathrm{~V} \leqslant \mathrm{H} \leqslant 30 \mathrm{~V} 0 \leqslant L \leqslant 2 \mathrm{~V}$, rising-edge trigger,counting,frequency:0.01~9kHz |
| Counting Speed | \$5000 CPS configured by sotware |
| Range Display | -1999~9999, -19999~99999, -199999~999999(Change automatically according to digit displayed) |
| Ratio Range | 0.01~99.9, $0.0001 \sim 9999.9,0.00001 \sim 99999.9$ (Change automatically according to digit displayed) |
| Input Inpedance | $\geqslant 10 \mathrm{~K} \Omega$ |
| Realy Output Mode | R,N,C,F,F,H,L(countint), High/Low alarm, Capacity: AC 250V/3A DC 30V/3A $\cos \phi=1$ |
| Analog Output | 1:4-20mA V:0-10V |
| Insulation Resistance | $\geqslant 100 \mathrm{M}$ ( DCC 500 V ) (between terminal and shell) |
| Insulation Strength | AC 1500V 1 min(between terminal and shell) |
| Working Environment | Temperature: $0-50{ }^{\circ} \mathrm{C}$, Humidity:35-85\% RH |
| Auxiliary Power | DC $12 \mathrm{~V} \pm 5 \% 50 \mathrm{~mA} \mathrm{max} / \mathrm{DC} \pm 24 \mathrm{~V} 5 \% 30 \mathrm{~mA}$ max |
| Weight | about 250g |

$\square$ Input Mode A,B,C,D Counting

| Input Mode A UP(add) | Input Mode B UP/DOWN(add/subtract) |
| :---: | :---: |
| INA: Input Counting INB: Controllor Terminal <br> INB at high level,INA inpur not allown; INB at low level,INA at UP counting | INA: Input Counting . INA: Controllor Terminal <br> INA at high level,INA at DOWN counting INB at high level.INB at UP counting |
| Input Mode C UP/DOWN(add and subtract ) INA-INB | Input Mode D UP/DOWN (phase difference input,used as Encoder) |
|  | INA Signal advance INB Signal, UP counting active; INA Signal lagging dehind INB Signal,DOWN counting active; |

$\square$ Input Modes

| Input Mode | Function Illustration |
| :---: | :---: |
| Mode A | INA: UPcounting, INB:GATE function,If INB is high level or short connected with $+12 \mathrm{~V}, \mathrm{INA}$ Input is not allown |
| Mode B | INA:UP counting, 1 NB :Countdown control function, If I INB is high level, 1 INA changes to DOMN counting |
| Mode C | INA:UP counting, INB:DOWN counting |
| Mode D | INA Signal advance INB Signal,UP counting active; INA Signal lagging dehind INB Signal,DOWN counting active; |

$\square$ Mounting and Installation
$\stackrel{\underbrace{}_{B}}{\substack{\text { Dimensions } \\ \underbrace{}_{A}}}$



| Size <br> Model | A | B | L | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FH4 | 48 | 48 | 80 | $45+0.5$ | $45+0.5$ |
| FH7 | 72 | 72 | 80 | $67.5+0.5$ | $67.5+0.5$ |
| FH8 | 96 | 48 | 80 | $91+0.5$ | $45+0.5$ |

$\square$ Diagram

> FH7
> FH8

