

# ISET 3<sup>1/2</sup> DIGIT PANEL METER

# AMB

## FEATURES

- Accuracy:  $\pm 0.1\%$  F.S.  $\pm 1$  digit (DC / Potentiometer / Resistor / PT-100 / Load Cell)  
 $\pm 0.2\%$  F.S.  $\pm 1$  digit (AC)
- Measuring AC, DC Voltage / AC, DC Current / Potentiometer / Resistor / PT-100 / Load Cell)
- High brightness 0.8" LED display range: -19999~99999; decimal point selectable
- High stability, non-flammable case (PC), high safety
- CE approval



## ORDER INFORMATION: AMB - [Code 1] [Code 2] - [Code 3]

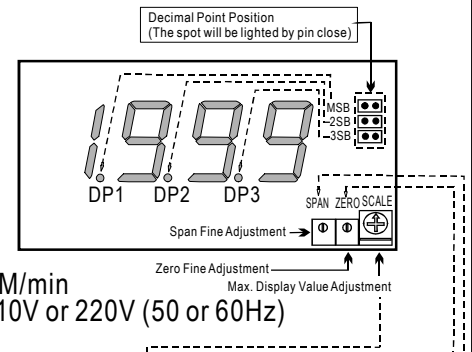
Code 1	Input Type	Code 2	Voltage	Code 2	Current	Code 2	Potentiometer	Code 2	Resistor	Code 2	RTD (PT-100)	Code 2	Load Cell	Code 3	Aux. Power
D	DC	V1	0~50mV	A1	0~20uA	P1	500Ω~10KΩ	I1	0~10Ω	T1	-50~50℃	L1	1mV/V EX.5V	A	AC 110/220V
A	AC AVG	V2	0~5V	A2	0~200uA	P2	10KΩ~100KΩ	I2	0~100Ω	T2	-100~100℃	L2	2mV/V EX.5V		
M	AC TRMS	V3	1~5V	A3	0~2mA	P3	100KΩ~1MΩ	I3	0~1KΩ	T3	-200~200℃	L3	3mV/V EX.5V		
P	3 Wire Potentiometer	V4	0~10V	A4	0~20mA	PO	Option	I4	0~10KΩ	T4	0~600℃	L4	1mV/V EX.10V		
I	2 Wire Resistor	V5	0~36V	A5	0~200mA			I5	0~100KΩ	TO	Option	L5	2mV/V EX.10V		
T	RTD (PT-100)	V6	0~300V	A6	4~20mA			IO	Option			L6	3mV/V EX.10V		
L	Load Cell	V7	0~600V	A7	0~2A							LO	Option		
2	2, 3 Wire Sensor	VO	Option	A8	0~5A										
4	4 Wire Sensor			A9	0~10A										
				AO	Option										

- \*\*1: 2 wire type offers excitation power DC24V for 2 wire (Loop Power) pressure, temperature, humidity sensors using.  
 2: 3.4 wire type offers excitation power DC24V for 3, 4 wire (Loop Power) pressure, temperature, humidity sensors using.  
 3: Load Cell type of excitation power DC5V can have 2 load cell in parallel; DC10V only can offer 1 load cell to use.

## SPECIFICATION

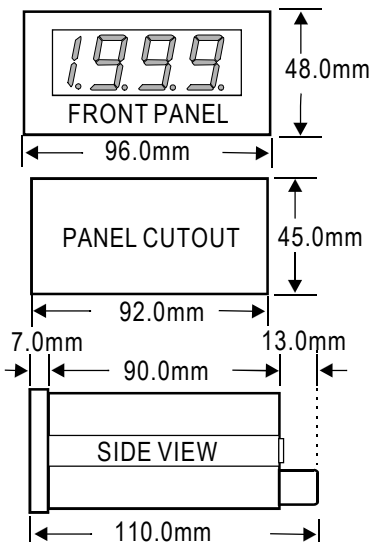
- ◆ Accuracy:  $\pm 0.1\%$  F.S.  $\pm 1$  digit (DC / Potentiometer / Resistor / PT-100 / Load Cell)  
 $\pm 0.2\%$  F.S.  $\pm 1$  digit (AC)
- ◆ Display Screen: High brightness red LED; 20.3mm(0.8")
- ◆ Sampling Time: 3 cycles / sec
- ◆ Display Range: -1999~1999
- ◆ Zero Adjustment:  $\pm 5\%$
- ◆ Over Range Indication: 1 or -1
- ◆ Polarity Indication: Automatic with "-" indication
- ◆ Temperature Coefficient: 100ppm / °C (0~60°C)
- ◆ Operating Temperature: 0~60°C
- ◆ Operating Humidity: 20~90% RH (non-condensing)
- ◆ Storage Temperature: -10~70°C
- ◆ Storage Humidity: 20~90% RH (non-condensing)
- ◆ Power Supply: AC 110/220V  $\pm 10\%$
- ◆ Power Consumption: 4.5VA
- ◆ Surge Test: 2KVac / 1min (Input / Power)
- ◆ Input Impedance: Voltage:  $>2V$  for 20KΩ / V;  $\leq 2V$  for  $>200M\Omega$   
Current:  $\geq 0.2A$  at 100mV;  $<0.2A$  at 1V

## CALIBRATION

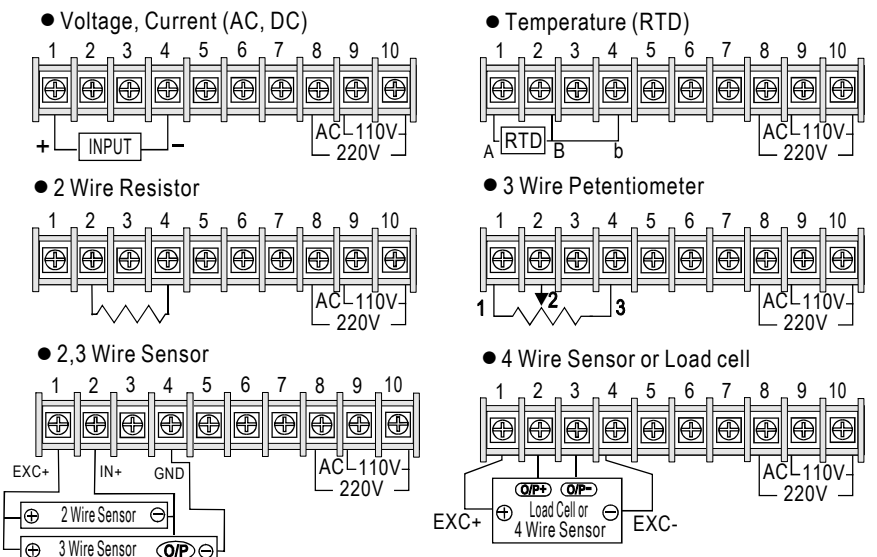


- Example:  
 Input: DC0-10V  
 Display: 0-100.0 M/min  
 Aux. Power: AC110V or 220V (50 or 60Hz)
- Calibrating Steps:  
 1. Close 3SB, and DP3 lights.  
 2. Input DC10V and adjust (SCALE) to max. display value 100.0  
 3. Input DC 0V and adjust (ZERO) to 0.00  
 4. Input DC 10V and fine adjust (SPAN), to 100.0  
 5. Finish the calibration

## DIMENSION



## WIRING CONNECTION



# ISET 5 DIGIT MICROPROCESSOR METER

# AM5-A

## FEATURES

- Accuracy:  $\pm 0.1\%$  F.S.  $\pm 1$  digit (DC / Potentiometer / Resistor / PT-100 / Load Cell)  
 $\pm 0.2\%$  F.S.  $\pm 1$  digit (AC)
- Measuring AC, DC Voltage / AC, DC Current / Potentiometer / Resistor / PT-100 / Load Cell
- High brightness 0.56" LED display range: -19999~99999; decimal point selectable
- Max. Hold / Data Hold / Reset and 2 display values selectable
- High stability, non-flammable case (PC), high safety
- CE approval



## ORDER INFORMATION: AM5-A- [Code 1] [Code 2] - [Code 3]

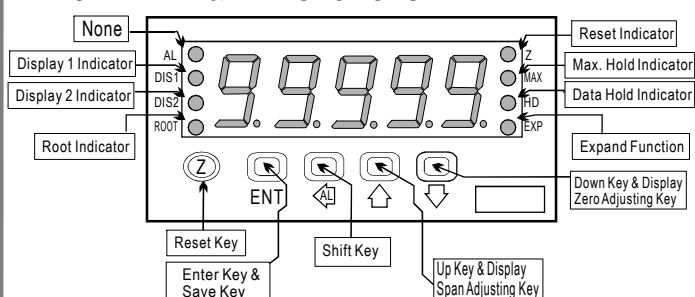
Code 1	Input Type	Code 2	Voltage	Code 2	Current	Code 2	Potentiometer	Code 2	Resistor	Code 2	RTD (PT-100)	Code 2	Load Cell	Code 3	Aux. Power
D	DC	V1	0~50mV	A1	0~20uA	P1	50K $\Omega$ ~10K $\Omega$	I1	0~10 $\Omega$	T1	-50~50 $^{\circ}$ C	L1	1mV/V EX.5V	A	AC 110/220V
A	AC AVG	V2	0~5V	A2	0~200uA	P2	10K $\Omega$ ~100K $\Omega$	I2	0~100 $\Omega$	T2	-100~100 $^{\circ}$ C	L2	2mV/V EX.5V	B	DC 12V
M	AC TRMS	V3	1~5V	A3	0~2mA	P3	100K $\Omega$ ~1M $\Omega$	I3	0~1K $\Omega$	T3	-200~200 $^{\circ}$ C	L3	3mV/V EX.5V	C	DC 24V
P	3 Wire Potentiometer	V4	0~10V	A4	0~20mA	PO	Option	I4	0~10K $\Omega$	T4	0~600 $^{\circ}$ C	L4	1mV/V EX.10V	D	DC 30~90V
I	2 Wire Resistor	V5	0~36V	A5	0~200mA			I5	0~100K $\Omega$	TO	Option	L5	2mV/V EX.10V		
T	RTD (PT-100)	V6	0~300V	A6	4~20mA			IO	Option			L6	3mV/V EX.10V		
L	Load Cell	V7	0~600V	A7	0~2A							LO	Option		
2	2, 3 Wire Sensor	VO	Option	A8	0~5A										
4	4 Wire Sensor			A9	0~10A										
				AO	Option										

- \*\*1: 2 wire type offers excitation power DC24V for 2 wire (Loop Power) pressure, temperature, humidity sensors using.  
 2: 3.4 wire type offers excitation power DC24V for 3, 4 wire (Loop Power) pressure, temperature, humidity sensors using.  
 3: Load Cell type of excitation power DC5V can have 2 load cell in parallel; DC10V only can offer 1 load cell to use.

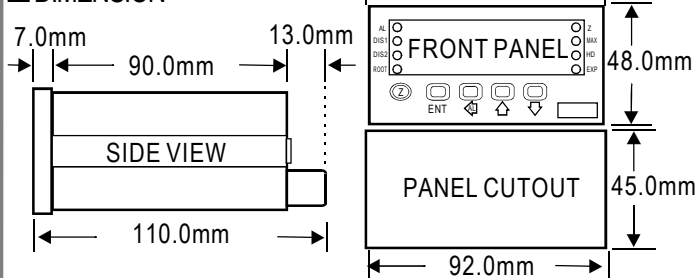
## SPECIFICATION

- ◆ Accuracy:  $\pm 0.1\%$  F.S.  $\pm 1$  digit (DC / Potentiometer / Resistor / PT-100 / Load Cell)  
 $\pm 0.2\%$  F.S.  $\pm 1$  digit (AC)
- ◆ Display Screen: High brightness red LED; 14.22mm(0.56")
- ◆ Sampling Time: 16 cycles / sec
- ◆ Display Range: -19999~99999
- ◆ Zero Adjustment: -19999~99999
- ◆ Over Range Indication: doFL / ioFL or -doFL / -ioFL
- ◆ Polarity Indication: Automatic with "-" indication
- ◆ Parameters Setting: Push buttons
- ◆ Back Up Memory: EEPROM
- ◆ Temperature Coefficient: 100ppm /  $^{\circ}$ C (0~60 $^{\circ}$ C)
- ◆ Operating Temperature: 0~60 $^{\circ}$ C
- ◆ Operating Humidity: 20~90% RH (non-condensing)
- ◆ Storage Temperature: -10~70 $^{\circ}$ C
- ◆ Storage Humidity: 20~90% RH (non-condensing)
- ◆ Power Supply: AC 110/220V  $\pm 10\%$ ; DC 12 / 24 / 30~90V
- ◆ Power Consumption: 4.5VA
- ◆ Surge Test: 2KVac / 1min (Input / Power)
- ◆ Input Impedence: Voltage:  $> 2V$  for 20K $\Omega$  / V;  $\leq 2V$  for  $> 200M\Omega$   
Current:  $\geq 0.2A$  at 100mV;  $< 0.2A$  at 1V

## FRONT PANEL & KEY FUNCTIONS

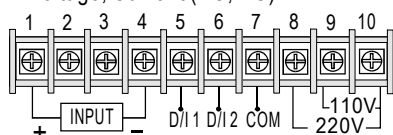


## DIMENSION

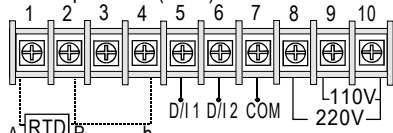


## WIRING CONNECTION

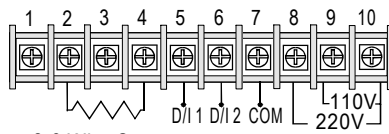
### Voltage, Current (AC, DC)



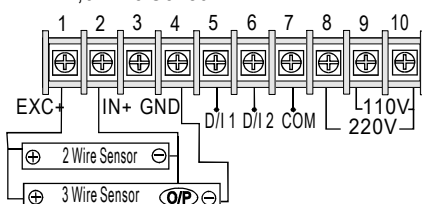
### Temperature (RTD)



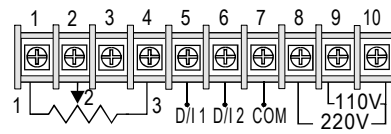
### 2 Wire Resistor



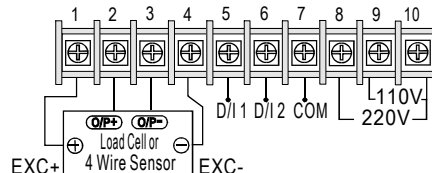
### 2,3 Wire Sensor



### 3 Wire Potentiometer



### 4 Wire Sensor or Load cell



# ISET 5 DIGIT MICRO PROCESSOR METER with 2 ALARMS

## AM5B-A

### FEATURES

- Accuracy: +0.1% F.S. +1 digit (DC / Potentiometer / Resistor / PT-100)  
+0.2% F.S. +1 digit (AC)
- Measuring AC, DC Voltage / AC, DC Current / Potentiometer / Resistor / PT-100
- High brightness 0.56" LED display range: -19999~99999; decimal point selectable
- Reset and 2 alarms (Normal Open Contact) setting (Hi or Lo) programmable
- High stability, non-flammable case (PC), high safety
- CE approval



### ORDER INFORMATION: AM5B-A - [Code 1] [Code 2] - [Code 3]

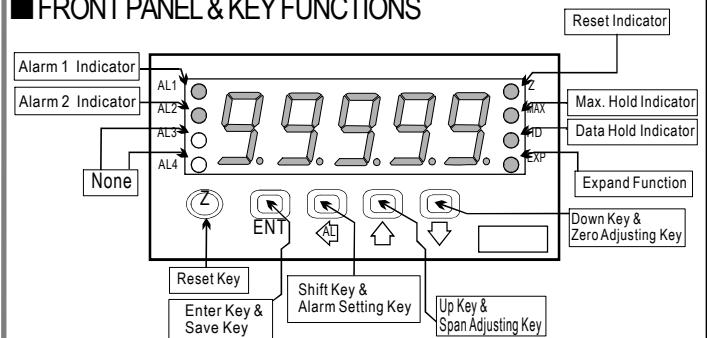
Code 1	Input Type	Code 2	Voltage	Code 2	Current	Code 2	Potentiometer	Code 2	Resistor	Code 2	RTD (PT-100)	Code 3	Aux. Power
D	DC	V1	0~50mV	A1	0~20uA	P1	500Ω~10KΩ	I1	0~10Ω	T1	-50~50℃	A	AC 110/220V
A	AC AVG	V2	0~5V	A2	0~200uA	P2	10KΩ~100KΩ	I2	0~100Ω	T2	-100~100℃	B	DC 12V
M	AC TRMS	V3	1~5V	A3	0~2mA	P3	100KΩ~1MΩ	I3	0~1KΩ	T3	-200~200℃	C	DC 24V
P	3 Wire Potentiometer	V4	0~10V	A4	0~20mA	PO	Option	I4	0~10KΩ	T4	0~600℃	D	DC 30~90V
I	2 Wire Resistor	V5	0~36V	A5	0~200mA			I5	0~100KΩ	TO	Option		
T	RTD (PT-100)	V6	0~300V	A6	4~20mA			IO	Option				
L	Load Cell	V7	0~600V	A7	0~2A								
2	2, 3 Wire Sensor	VO	Option	A8	0~5A								
4	4 Wire Sensor			A9	0~10A								
				AO	Option								

- \*\*1: 2 wire type offers excitation power DC24V for 2 wire (Loop Power) pressure, temperature, humidity sensors using.  
2: 3.4 wire type offers excitation power DC24V for 3, 4 wire (Loop Power) pressure, temperature, humidity sensors using.

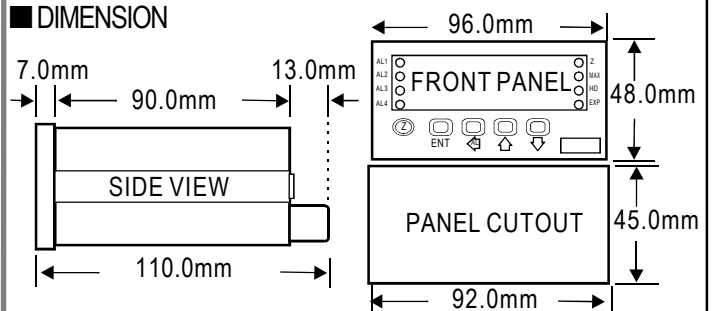
### SPECIFICATION

- ◆ Accuracy: +0.1% F.S. +1 digit (DC / Potentiometer / Resistor / PT-100)  
+0.2% F.S. +1 digit (AC)
- ◆ Display Screen: High brightness red LED; 14.22mm(0.56")
- ◆ Sampling Time: 16 cycles / sec
- ◆ Display Range: -19999~99999
- ◆ Zero Adjustment: -19999~99999
- ◆ Over Range Indication: doFL / ioFL or -doFL / -ioFL
- ◆ Polarity Indication: Automatic with "-" indication
- ◆ Parameters Setting: Push buttons
- ◆ Back Up Memory: EEPROM
- ◆ Alarm Action: " = (Hi) on" or "< (Lo) on"
- ◆ Alarm Run Delay Time: 0~99 sec
- ◆ Relay Contact: AC 277V / 7A; DC 30V / 7A
- ◆ Temperature Coefficient: 100ppm / C (0~60 C)
- ◆ Operating Temperature: 0~60℃
- ◆ Operating Humidity: 20~90% RH (non-condensing)
- ◆ Storage Temperature: -10~70℃
- ◆ Storage Humidity: 20~90% RH (non-condensing)
- ◆ Power Supply: AC 110/220V +10%; DC 12 / 24 / 30~90V
- ◆ Power Consumption: 4.5VA
- ◆ Surge Test: 2KVac / 1min (Input / Power)
- ◆ Input Impedence: Voltage: >2V for 20KΩ / V; ≤2V for >200MΩ  
Current: ≥0.2A at 100mV; <0.2A at 1V

### FRONT PANEL & KEY FUNCTIONS

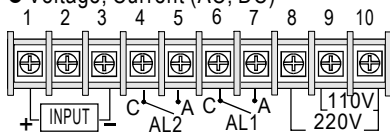


### DIMENSION

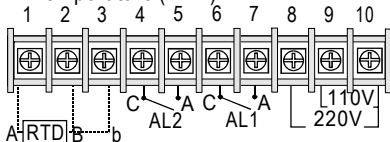


### WIRING CONNECTION

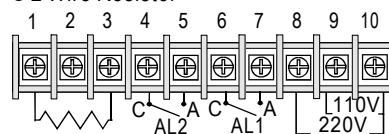
#### ● Voltage, Current (AC, DC)



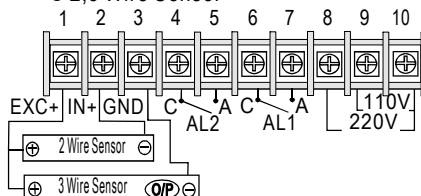
#### ● Temperature (RTD)



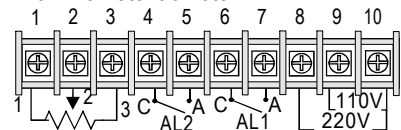
#### ● 2 Wire Resistor



#### ● 2,3 Wire Sensor



#### ● 3 Wire Potentiometer



# ISET 10 DIGIT PROCESS TOTALIZER METER with ALARMS / ANALOG OUTPUT

## KFM-TR

### FEATURES

- Accuracy:  $\pm 0.003\%$  F.S.
- High brightness 0.4" LED; Rate of display range: 0~99999
- Rate / Total decimal point selectable
- Flow unit selectable: Liter / Gal / C.C. / m<sup>3</sup>
- Time unit selectable: sec / min / hour
- K factor programmable for liter per pulse output
- Total scale programmable (0.0001~9.9999)
- Pulse input range: 0.001~100KHz
- Reset for Total by external control input
- 2 Alarms for Rate / 2 alarm for Total (Alarm 1 programmable) / Pulse Output / Analog Output (15 bit resolution) optional (The above options can exist together)
- High stability, non-flammable case (PC), high safety
- CE approval



### ORDER INFORMATION: KFM-TR - [Code 1] - [Code 2] - [Code 3] [Code 4] [Code 5] [Code 6] [Code 7]

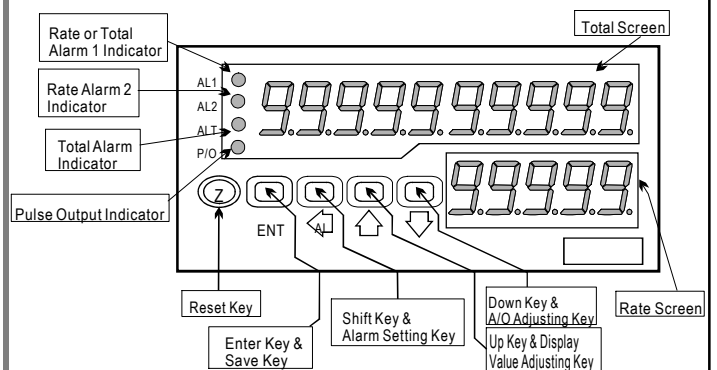
Code 1	Input Signal	Code 1	Input Signal	Code 2	Aux. Power	Code 3	Alarm 1 Setting	Code 4	Rate Alarm Output	Code 5	Total Alarm Output	Code 6	Pulse O/P	Code 7	Analog Output
N5	NPN(5V)	VC	Pick-up 50mV~1.5V	A	AC/DC 100~240V	N	None	N	None	N	None	N	None	N	None
N2	NPN(12V)	VD	Pick-up 500mV~15V	B	DC 12V	R	Rate Alarm x 1	R	1 Relay	T	1 Relay	Y	P/Count	A	4~20mA
P5	PNP(5V)	VE	DC 24Vp	C	DC 24V	T	Total Alarm x 1							V	0~10V
P2	PNP(12V)	CT	Contact	D	DC 30~90V									O	Option
		O	Option												

\*\*1: NPN(5V), PNP(5V) offers excitation power DC5V; NPN(12V), PNP(12V) offers excitation power DC12V for flow sensors using.  
2: Please use PNP/NPN(5V/12V) or DC24Vp for DC pulse input.

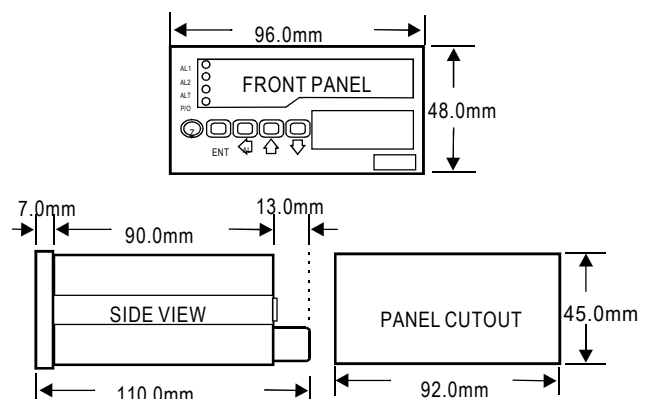
### SPECIFICATION

- ◆ Accuracy:  $\pm 0.03\%$  F.S.
- ◆ Display Screen: High brightness red LED; 10.16mm(0.4")
- ◆ Pulse Sampling Time: 10 cycles / sec (>10Hz)  
f cycles / sec (<10Hz)
- ◆ Display Range: Rate: 0~19999  
Total: 0~9999999999
- ◆ Over Range Indication: doFL / ioFL
- ◆ Polarity Indication: Automatic with "-" indication
- ◆ Parameters Setting: Push buttons
- ◆ Back Up Memory: EEPROM
- ◆ Alarm Action: Rate: " $\geq$  (Hi) on" or "< (Lo) on"  
Total: " $\geq$  (Hi) on"
- ◆ Alarm Run Delay Time: 0~99 sec
- ◆ Relay Contact: AC 277V / 7A; DC 30V / 7A
- ◆ Analog Output Resolution: 15 bit
- ◆ Output Response Time: <250 msec (0~90%)
- ◆ Output Capability: Voltage Output: <20mA  
Current Output: <10V
- ◆ Temperature Coefficient: 100ppm / °C (0~60°C)
- ◆ Operating Temperature: 0~60°C
- ◆ Operating Humidity: 20~90% RH (non-condensing)
- ◆ Storage Temperature: -10~70°C
- ◆ Storage Humidity: 20~90% RH (non-condensing)
- ◆ Power Supply: AC/DC 100~240V; DC 12 / 24 / 30~90V
- ◆ Power Consumption: 8.5VA (all functions output)
- ◆ Surge Test: 1.5KVac / 1min (Input / Power)

### FRONT PANEL & KEY FUNCTIONS



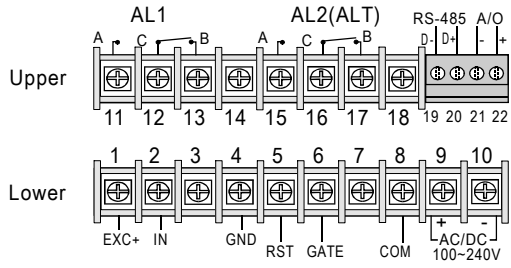
### DIMENSION



# WIRING CONNECTION

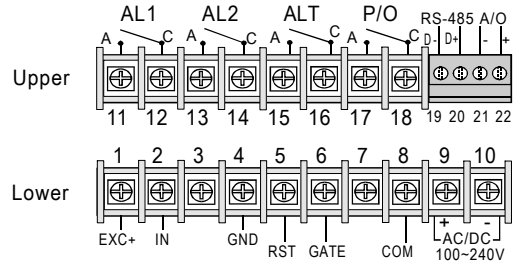
## 2 Alarms for Rate

- Pulse / Mechanical Contact / Magnetic (Pick Up)



## 2 Alarms for Rate / 1 Alarm for Total / Pulse Output for Total

- Pulse / Mechanical Contact / Magnetic (Pick Up)



# ISET 10 DIGIT PROCESS TOTALIZER METER with ALARMS / ANALOG OUTPUT

## KFM-TA

### FEATURES

- Accuracy:  $\pm 0.1\%$  F.S.  $\pm 1$  digit
- High brightness 0.4" LED; Rate of display range: 0~99999
- Rate / Total decimal point selectable
- Time parameters programmable (sec / min / hour)
- Total scale programmable (0.0001~9.9999)
- Reset for Total by external control input
- Roof square function available for analog input
- 2 Alarms for Rate / 2 alarm for Total (Alarm 1 programmable) / Pulse Output / Analog Output (15 bit resolution) optional (The above options can exist together)
- High stability, non-flammable case (PC), high safety
- CE approval



### ORDER INFORMATION: KFM-TA- [Code 1] [Code 2] - [Code 3] - [Code 4] [Code 5] [Code 6] [Code 7] [Code 8]

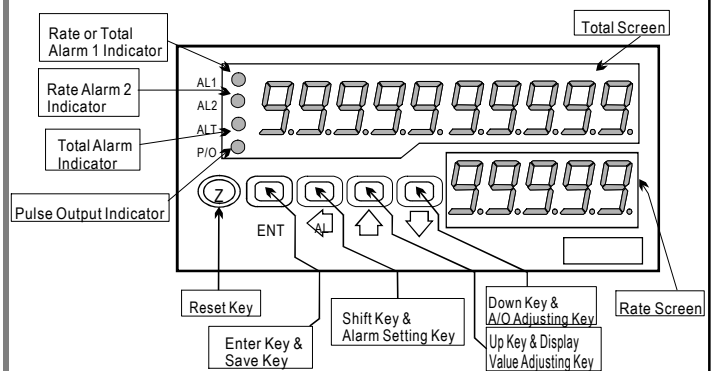
Code 1	Input Type	Code 2	Input Signal	Code 3	Aux. Power	Code 4	Alarm 1 Setting	Code 5	Rate Alarm Output	Code 6	Total Alarm Output	Code 7	Pulse O/P	Code 8	Analog Output
D	DC	A6	4~20mA	A	AC/DC 100~240V	N	None	N	None	N	None	N	None	N	None
2	2, 3 Wire Sensor	V3	1~5V	B	DC 12V	R	Rate Alarm x 1	R	1 Relay	T	1 Relay	P	P/Count	A	4~20mA
4	4 Wire Sensor	V4	0~10V	C	DC 24V	T	Total Alarm x 1							V	0~10V
		O	Option	D	DC 30~90V									O	Option

\*\*1: 2 wire type offers excitation power DC24V for 2 wire (Loop Power) flow sensors using.  
2: 3.4 wire type offers excitation power DC24V for 3, 4 wire (Loop Power) flow sensors using.

### SPECIFICATION

- ◆ Accuracy:  $\pm 0.1\%$  F.S.  $\pm 1$  digit
- ◆ Display Screen: High brightness red LED; 10.16mm(0.4")
- ◆ Sampling Time: 16 cycles / sec
- ◆ Display Range: Rate: 0~19999  
Total: 0~9999999999
- ◆ Zero Adjustment: Rate: 0~99999
- ◆ Over Range Indication: doFL / ioFL or -doFL / -ioFL
- ◆ Polarity Indication: Automatic with "-" indication
- ◆ Parameters Setting: Push buttons
- ◆ Back Up Memory: EEPROM
- ◆ Alarm Action: Rate: " $\geq$  (Hi) on" or "< (Lo) on"  
Total: " $\geq$  (Hi) on"
- ◆ Alarm Run Delay Time: 0~99 sec
- ◆ Relay Contact: AC 277V / 7A; DC 30V / 7A
- ◆ Analog Output Resolution: 15 bit
- ◆ Output Response Time: <250 msec (0~90%)
- ◆ Output Capability: Voltage Output: <20mA  
Current Output: <10V
- ◆ Temperature Coefficient: 100ppm / °C (0~60°C)
- ◆ Operating Temperature: 0~60°C
- ◆ Operating Humidity: 20~90% RH (non-condensing)
- ◆ Storage Temperature: -10~70°C
- ◆ Storage Humidity: 20~90% RH (non-condensing)
- ◆ Power Supply: AC/DC 100~240V; DC 12 / 24 / 30~90V
- ◆ Power Consumption: 8.5VA (all functions output)
- ◆ Surge Test: 1.5KVac / 1min (Input / Power)
- ◆ Input Impedence: Voltage: >2V for 20K $\Omega$  / V;  $\leq$ 2V for >200M $\Omega$   
Current:  $\geq$  0.2A at 100mV; <0.2A at 1V

### FRONT PANEL & KEY FUNCTIONS



### DIMENSION

