

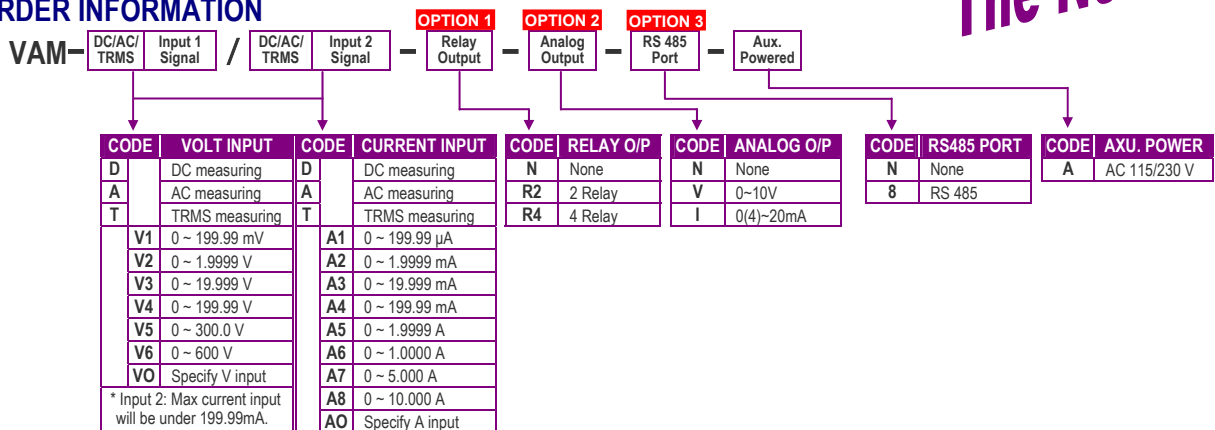
FEATURE

- Measuring 2 channels Voltage and Current for DC / AC / TRMS with dual display screen for **dual isolated input**
- Accuracy: $\pm 0.04\%$; Display range: -19999~99999 with **Mathematic function Addition / Subtraction / Multiplication / Division / high or low selector in 2 channels input**
- User function, Easily programmable via the front panel
- **4 relay for Hi / Lo / Go / DO energized with Start Delay / Hysteresis / Energized & De-energized Delay / Relay Energized Hold..... functions**
- Analogue output, RS 485 communication port available in optional
- CE Approved



The Newest

ORDER INFORMATION



SPECIFICATION

Measuring Range DC / AC / TRMS	Input Impedance	Measuring Range DC / AC / TRMS	Input Impedance
Voltage	0~199.99 mV $\geq 5M$ ohm	Current	0~199.99 μ A 1K ohm
	0~1.9999 V $\geq 1M$ ohm		0~1.9999 mA 100 ohm
	0~19.999 V $\geq 1M$ ohm		0~19.999 mA 10 ohm
	0~199.99 V $\geq 1M$ ohm		0~199.99 mA 1 ohm
	0~300.0 V $\geq 1M$ ohm		0~1.9999 A 0.05 ohm
	0~600.0 V $\geq 1M$ ohm		0~5.000 A 0.02 ohm
			0~10.000 A 0.01 ohm

* Dual input cab be selected individual in Voltage & Current for DC, AC or TRMS

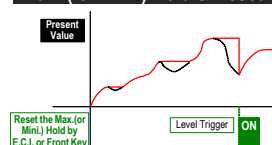
- Calibration: System calibration by front key
- Accuracy: DC: $\leq \pm 0.04\%$ of FS $\pm 1C$;
AC: $\leq \pm 0.1\%$ of FS $\pm 1C$;
Response time: ≤ 100 msec.(when the AvG = "1")
- Operating
- Operation key: 4 keys for Enter(Function) / Shift(Escape) / Up / Down
Up key: increase the number / back to previous function
Down key: decrease the number / go to next function
Shift key: move the flash digit position / Return back to upper level
Enter/Fun key: enter the parameters you set or function select
- Security function: 4 digits password
- Lock function: 3 function group lock level for None/User Level/ Engineer Level / All(Engineer Level & User Level)

Display functions

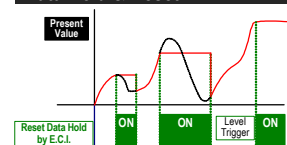
- LED: **Measuring value: Dual screen,**
0.39" red high-brightness LED
Relay output indication: square red LED
RS 485 communication: square green LED
Max. / Mini. Hold: square red LED
- Low Cut function[Lo.Ct.1(2)]: Settable range: -19999~19999 counts
- Average function: AvG : Settable range: 1~99 times
- Digital Filter: d.FILt : Settable range: 0(None)/1~99 times
- Display Range: -19999~99999 by mathematic

- Over range indication: ovFL, when input is over 120% of input range Hi
- Under range indication: -ovFL, when input is under -120% of input range Lo
- Mathematic[MAth.1(2)]: **Selectable Addition / Subtraction / Multiplication / Division / High or Low selector**
- Display functions: **Present Value / Maximum Hold / Minimum Hold / Write to display by RS485 command**
[dPLY.1(2)]

Max. (or Mini.) Hold & Reset



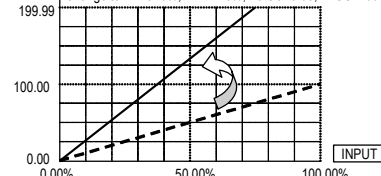
Data Hold & Reset



Scaling

- Input range function: [Ai1(2).Lo]: 0~100% of input
[Ai1(2).Hi]: 0~100% of input
- Scaling function: [Hi.SC.1(2)] (High scale): -19999~29999
[Lo.SC.1(2)] (Low scale): -19999~29999

SCALE: Default: Ai.Lo: 0%, Ai.Hi: 100%; Lo.SC: 0.00, Hi.SC: 100.00
Change to Ai.Lo: 0%, Ai.Hi: 75%; Lo.SC: 0.00, Hi.SC: 199.99



- Decimal point[Pv1(2).dP]: Settable from 0 / 0.0 / 0.00 / 0.000 / 0.0000
- Control functions(optional)

Control relay:

2 Relays SPDT, 1A/230Vac, 3A/115V
2 Relays SPST, 1A/230Vac, 3A/115V

Relay Output:

Multi-Cross selection with display 1 & display 2

Energized levels compare with set-points:

Hi / Lo / Hi.HLd / Lo.HLd / do / Go-1.2 / Go-2.3

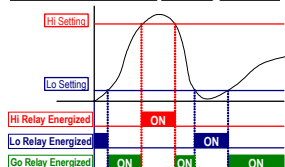
DO function: Energized by RS485 command

Relay Energized Hold : Selectable Low or High Hold

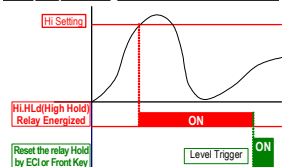
4 1/2 DIGITAL VOLT & AMP METER-DUAL DISPLAY

VAM_(1.0)

Hi / Lo / Go Relay Energized



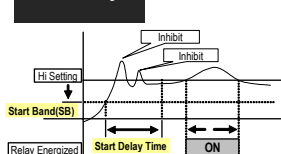
Hi(Lo) Energized Hold & Reset



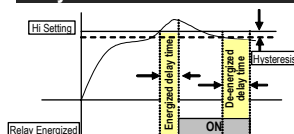
Functions:

Start delay / Energized & De-energized delay / Hysteresis
Relay Trip Selection[r1(2).SEL]: Multi-Cross selection
Start band[rY.Sb.1(2)]: 0~9999 counts
Start delay time[rY.Sb.1(2)]: 0:00.0~9(M):59.9(S)
Energized & De-energized delay time: 0:00.0~9:59.9
 Hysteresis: 0~5000 counts

Start Delay



Energized / De-energized Delay & Hysteresis



Analogue output(option)

- Accuracy: $\leq \pm 0.1\%$ of F.S.; 16 bits AD converter
- Ripple: $\leq \pm 0.1\%$ of F.S.
- Response time: ≤ 200 msec. (10~90% of input)
- Isolation: AC 2.0 KV between input and output
- Output range: Specify Voltage or Current
 Voltage: 0~5V / 0~10V / 1~5V selectable
 Current: 0~10mA / 0~20mA / 4~20mA selectable
Ao.Hi(output high): PV Hi vs. output range Hi
Ao.Lo(output range Low): PV Low vs. output range Lo
Ao.LM(output High Limit): 0.00~110.00% of output High

RS 485 communication(optional)

- Protocol: Modbus RTU mode
- Baud rate: Selectable 2400/4800/9600/19200/38400
- Data bits: Selectable 7 or 8 bit
- Parity: Selectable Even, odd or none (with 1 or 2 stop bit)
- Device no: Setable 1 ~ 255
- Write function: Write to display value from PC's RS485 command

Power

- Power Supply: AC 115/230V, 50/60Hz
- Power consumption: 5VA
- Back up memory: By EEPROM

Environmental

- Operating temperature: 0~60 °C
- Operating relative humi.: 20~95 %RH, Non-condensing
- Temperature coefficient: ≤ 100 PPM/°C
- Storage temperature: -10~70 °C
- Enclosure: Front panel: IEC 549 (IP54)

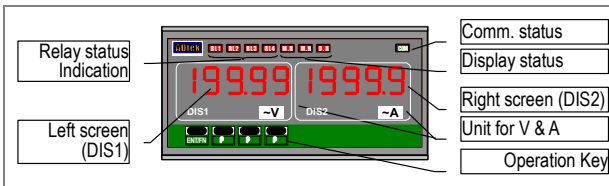
Electrical safety

- Dielectric Strength: AC 2.0 KV for 1 min
 Between Power / Input 1 / Input 2 / Output / Case
- Insulation resistance: $\geq 100M$ ohm at 500Vdc
- Isolation: Between Power / Input / Output
- EMC: EN61326
- Safety: EN61010

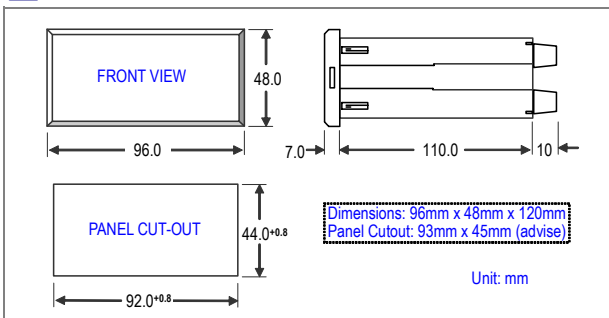
Mechanical

- Dimensions: 96mm(W) x 48mm(H) x 120mm(D)
- Panel cutout: 92mm(W) x 44mm(H)
- Case Material: ABS fire-protection (UL 94V-0)
- Mounting: Panel flush mounting
- Terminal block: Plastic NYLON 66 (UL 94V-0)
 #A1~A3: 20A/300Vac, M3.5, 12~22AWG
 Others: 10A 300Vac, M2.6, 16~22AWG
- Weight: 550g

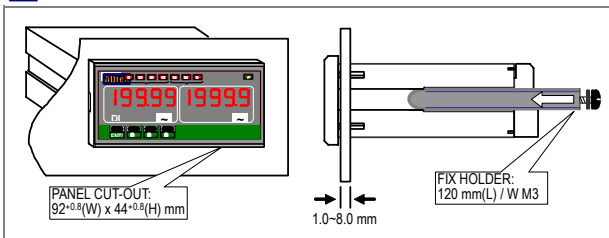
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

