

VICTOR 05 Loop calibrator



VICTOR 05
Accuracy:
±0.05%

Technical data (Measuring function)

Input	Range	Input range	Resolution	Accuracy	Explanation
Voltage	28V	-0.200~28.000V	1mV	±0.02% reading ±2mV	Input resistance 2MΩ
Current	20mA	-1.000~22.000mA	0.001mA	±0.02% reading ±4uA	Input resistance 20MΩ
Loop current	20mA	0.000~22.000mA	0.001mA	±0.02% reading ±4uA	Supply 24V loop power

Output function

Output	Range	Output range	Resolution	Accuracy	Explanation
Current	20mA	0.000~22.000mA	0.001mA	±0.05% Setting value ±4uA	20mA, the max. overload is 1kΩ (Note 1)
Analogue transducer	-20mA	0.000~22.000mA	0.001mA	±0.05% Setting value ±4uA	20mA, the max. overload is 1kΩ (Note 2)
Loop power	24V			±10%	The max. output current is 25mA

General Characters

Power	9V battery (ANSI/NEDA 1640A or IEC 6LR 619 alkaline) or AC power adapter
Battery	Approx. 20 hours under the condition of 10mA
Max. allowable voltage	30V
Operation temperature range	0~50°C
Operation humidity range	≤80%RH
Store temperature range	≤-10°C~55°C
Store humidity range	≤90%RH
Size	200×100×40mm
Weight	550g (with holster)
Accessories	Operation manual, test line CF-36 (probe with alligator clip)
Options	AC adapter (VCPS), test line CF-31-A (probe clip)
Security	Conforms to IEC 1010

Note:

1. The max. overload is 1kΩ at 20mA range when the power is higher than 6.8V, The max. overload is 700Ω at 20mA range when the power is higher than 5.8-6.8V,
2. Power supply range: DC 5-25V
3. Temperature coefficient: ±0.005%, range/°C (0°C~18°C, 28°C~50°C)

MINI OSCILLOSCOPE



VICTOR 101

Basic function	VICTOR 101
Display	2.8" colour TFT LCD
Resolution	320×240
Display colors	65K
Analog bandwidth	0-200kHz
Max. sampling rate	1Msps 12 status
Sampling store depth	4096 points
Transverse sensitivity	1uS/Div10S/Div(1-2-5 step)
Vertical sensitivity	10mV/Div10/Div(×1 probe) 0.5V/Div10V/Div(×10 probe)
Input impedance	>500KΩ
Max. input voltage	80Vpp(×1 probe)
Coupled modes	DC
Trigger modes	Auto, Norma, Single, None, Scan
Auto measurement	Frequency, cycle, duty, Vpp, Vram, Vavg, DC voltage
	Vertical accurate measurement of the cursor
	Lever accurate measurement of the cursor Rise/fall edge trigger
	Trigger the cursor Trigger sensitive cursor Holding/operation
Test signal built-in	10Hz~1MHz(1-2-5 step)
Wave memory	SD card
PC interface	Through the USB connecting
Charging way	Through the USB charging
Size	105mm×53mm×8mm



VICTOR 102

Basic function	VICTOR 102
Display	3" colour LCD 240×400
Input channel	Analog: CH(A) \CH(B) digital: CH(C) \CH(D)
Max. sampling rate	72MS/s, 8 bit
Sampling store depth	Single channel 8 bit, 4 channel 4×4bit
Vertical sensitivity	20mV~10V/div(1-2-5 step)(adopt×1 probes)
	200mV~100V/div(1-2-5 step)(adopt×10 probes)
Vertical resolution	8 bit
Level sensitivity	0.1uS/Div~1S/Div
Lever position	Adjustable
Input coupling way	AC/DC
Maximum input voltage	80Vpp(adopt×1 probes) 400Vpp(adopt×10 probes)

VICTOR 11⁺ Process calibrator



VICTOR 11⁺
Accuracy:
±0.02%

Features:

High Accuracy of 0.02% for source, 6 digits display for source. A dual, Liquid Crystal Display; White LED for backlight

Technical data (Output function)

Function	Reference	Range	Resolution	Accuracy	Remark
Thermocouple	R	0°C~1767°C	1°C	0~100°C:1.5°C	By using ITS-90 temperature scale; The accuracy does not include the error of internal temperature compensation caused by a sensor;
	S	0°C~1767°C	1°C	100~1767°C:1.2°C	
	B	600°C~1820°C	1°C	0~100°C:1.5°C	
	E	-200.0°C~1000.0°C	0.1°C	100~1767°C:1.2°C	
	K	-200.0°C~1372.0°C	0.1°C	600~800°C:1.5°C	
	J	-200.0°C~1200.0°C	0.1°C	800~1820°C:1.1°C	
	T	-250.0°C~400.0°C	0.1°C	-200.0~100.0°C:0.6°C	
	N	-200.0°C~1300.0°C	0.1°C	-100.0~600.0°C:0.5°C	
	L	-200.0°C~900.0°C	0.1°C	600.0~1000.0°C:0.4°C	
	U	-200.0°C~600.0°C	0.1°C	-200.0~100.0°C:0.6°C	
				-100.0~400.0°C:0.5°C	
				400.0~1200.0°C:0.7°C	
DC voltage	100mV	-10.000~110.000mV	1uV	0.02+0.01	Maximum output :0.5mA
	1000mV	-100.00~1100.00mV	10uV	0.02+0.01	Maximum output :2mA
	10V	-1.0000~11.0000V	0.1mV	0.02+0.01	Maximum output :5mA
	20mV	0.000mA~22.000mA	1uA	0.02+0.02	Simulator transmitter:5-28V power supply outside: 1kΩ at 20mA
DC current	400Ω	0.00Ω~400.00Ω	0.01Ω	0.02+0.02	Excitation current: ±0.5~3mA; if ±0.1~0.5mA, add 0.1Ω;
	4KΩ	0.0000KΩ~4.0000KΩ	0.1Ω	0.05+0.025	Does not include lead resistance
	40KΩ	0.000KΩ~40.000KΩ	1Ω	0.1+0.1	Excitation current: ±0.05~3mA; Does not include lead resistance
					Excitation current: ±0.01mA; Does not include lead resistance
Resistance	Pt100 385	-200.0°C~800.0°C	0.1°C	-200.0~0.0°C:0.3°C	By using temperature scale ITS-90
	Pt200 385	-200.0°C~630.0°C		0.0~400.0°C:0.5°C	
	Pt500 385			400.0~800.0°C:0.8°C	
	Pt1000 385			-200.0~100.0°C:0.8°C	
				100.0~300.0°C:0.9°C	
				300.0~630.0°C:1.0°C	
				-200.0~100.0°C:0.4°C	
				100.0~300.0°C:0.5°C	
				300.0~630.0°C:0.7°C	
				-200.0~100.0°C:0.2°C	
FREQ	Cu10	-100.0°C~260.0°C		1.8°C	Output voltage: +1~+11V (zero base waveform); Amplitude accuracy: ±5% reading value +0.5V; Maximum load: >100KΩ; Duty Cycle: 50%
	Cu50	-50.0°C~150.0°C		0.6°C	
	100Hz	1.00Hz~110.00Hz	0.01Hz	±2 count	
	1KHz	0.100KHz~1.100KHz	1Hz		
	10KHz	1.0KHz~11.0KHz	0.1KHz		
	100KHz	10KHz~110KHz	2KHz	±5 count	
PULSE	100Hz	1~100000cycles	1 cyc	±2 count	Contact output (with 0.0V amplitude setting, FET switch ON/OFF) Maximum open/close voltage/current: +28V/50mA
	1KHz				
	10KHz				
SWITCH	100Hz	1.00Hz~110.00Hz	0.01Hz	±2 count	
	1KHz	0.100KHz~1.100KHz	1Hz		
	10KHz	1.0KHz~11.0KHz	0.1KHz		
	100KHz	10KHz~110KHz	2KHz	±5 count	

Other feature:

- Temperature Coefficient: 0.1 times the applicable accuracy, specification per degree C for 5°C to 18°C and 28°C to 50°C.
- The range of the internal temperature compensation sensor is from 0°C to 40°C, Compensation error ≤ ±0.5°C.
- The accuracy of the temperature probe: ±0.2°C. The range of measured temperature is form -20°C~100°C.
- Maximum voltage between any output terminal and earth: 30Vp-p.
- Maximum output current: Approximately 25mA.