

The Tekneka TCAL30 Volt/mA loop calibrator is both a source and a measurement device. This calibrator measures and outputs DC voltage between 0 and 20V with an accuracy of $\pm 0.02\%$ and a current loop between 0 and 24mA with an accuracy of $\pm 0.015\%$. It is ideal for industrial companies involved in developing and verifying measurement chains. This kind of calibrator has the benefit of being able to calibrate an instrument without taking it out of the process.

Features

- It provides stable current and high output voltage
- Easy to switch between V to mV and mA to mA%
- Large numerical digits with 3" LCD
- Output voltage and current are adjustable
- By default 30 minutes for auto power off
- Sub-display zone for mA reference indication
- Enhanced durability designed for industrial use

Applications

Tekneka TCAL30 is widely used by instrument control technicians, calibration laboratories, industrial field service engineers, quality control professionals, maintenance technicians, and automation and control system engineers.



Technical Specifications

DC voltage input/output

Voltage Range	Resolution	Accuracy
100mV	0.01mV	$\pm 0.02\% + 3 \text{ dig.}$
20V	0.001V	$\pm 0.02\% + 3 \text{ dig.}$

Input impedance: $2M\Omega$ (rated value), $< 100pF$

Protection against over voltage: 30V Current

Delivered by rated voltage: 1mA

Loop Voltage Supply: $24V \pm 10\%$

DC current input/output

Current Range	Resolution	Accuracy
24mA	0.001mA	$\pm 0.015\% + 3 \text{ dig.}$

Protection against overload: 125mA/250V quick-response fuse

Display as percentage: 0% = 4mA, 100% = 20mA

Source mode: 1000Ω load at 20mA for battery voltage $\geq 6.8V$, (700Ω at 20mA for a battery voltage between 5.8V and 6.8V)

Simulation: External loop voltage condition: 24V (rated value), 30V maximum, 12V minimum

Packing Includes

- Holster
- Test Leads
- 6 x AAA Batteries
- Calibration Certificate
- User Manual

Ordering Info

TCAL30..... Loop Calibrator (V/mA)

General Specifications

Units	V/mV, mA/mA%
Power Supply	6 x 1.5V
Storage Temperature	-40 to 60°C (-40 to 140°F)
Operating Temperature	0 to 50°C (32 to 122°F)
Dimension	205 x 97 x 45mm
Weight	472g
Mains Power Supply	Input: 100 ~ 240V AC, 50 ~ 60Hz 1.8A Output: 12V DC, 2A Max