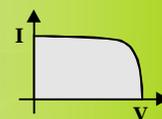


# Curve Tracer IV01



IV01 is an extremely compact and versatile curve tracer for photovoltaic modules. Using this device you can automatically measure the I-V characteristics of a single module or an entire string with total power rating up to about 10 kWp.

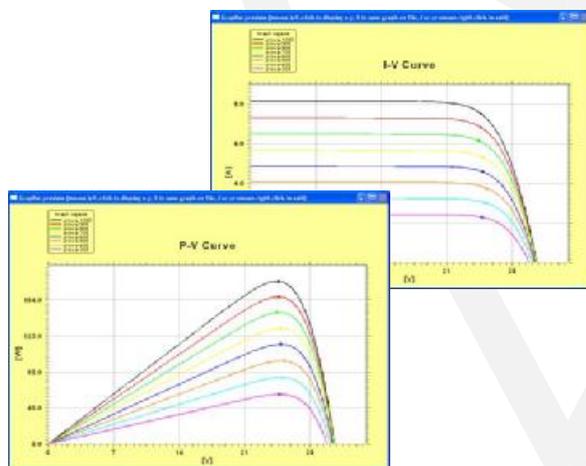
Commands and data are communicated and read from IV01 through a wireless radio modem RM01. Battery power (contained in the device RM01) allows sufficient autonomy to many hours of measurements, when necessary, it can be fully recharged within a couple of hours.



IV01 is switched on after inserting the wireless modem RM01 into the slot of the instrument. The data are transmitted to the wireless DL02 datalogger connected via USB to a standard PC. The same datalogger is responsible for receiving signals of irradiance and temperature when it is requested to normalize the measured curve in accordance with EN60891.

Wireless communication allows operation in complete safety with the operator away from potentially dangerous electrical components and at the same time minimizing the length of the measurement leads with the unit close to the panel under test.

The number of points on the curve can be set in a range from 128 (low resolution mode) to 1024 points (high resolution mode). The current/voltage ranges and the internal load capacitance value are automatically selected by the instrument, all that is required to perform a complete measurement is to send a single remote command from your PC to IV01.





## IV01 ready to operate

For more details on the complete measuring system with datalogger and meteo station (Photozig system), please read the respective data sheets.

### Ordering codes:

Code	Name	Description
8802900	IV01	I-V Curve Tracer
8802210	RM01-P	Radio Modem RM01-P with battery included
8802423	-	MC3 adapter cable set
8802424	-	MC4 adapter cable set
8802425	-	H+S Radox adapter cable set
8802426	-	Tyco adapter cable set
8802427	-	Test clips adapter cable set
8802430	-	DC disconnecter

## Technical specifications

### VOLTAGE

Range: 0.0...900.0 V  
Resolution: 0.1 V  
Accuracy:  $\pm(0.5\% \text{ rdg} + 2 \text{ dgt})$

### CURRENT

Range: 0.00...12.00 A  
Resolution: 0.01 A  
Accuracy:  $\pm(0.5\% \text{ rdg} + 2 \text{ dgt})$

### I-V ACQUISITION

Measurement points: 128 / 256 / 512 / 1024  
AD converters: 16 bit / 100 KHz  
Main Timings:  
- measurement sweep: 0.002...9 s  
- load discharge: 0.16...6 s  
- data transmission (typ): 1.5 s (128 points)  
11 s (1024 points)

### POWER SUPPLY

3.5...5.1 Vdc  
Battery life (internal to RM01-P, typical values):  
- 30 h (no sweep)  
- 10 h (1200 sweeps of 128 points, 2 sweeps/min)  
- 3 h (360 sweeps of 1024 points, 2 sweeps/min)

### ENVIRONMENT

Reference temperature:  $23^{\circ}\pm 2^{\circ}\text{C}$  ( $45\% < \text{RH} < 75\%$ )  
Working temperature:  $0^{\circ}\dots 40^{\circ}\text{C}$  ( $\text{RH} < 80\%$ )  
Storage temperature:  $-10^{\circ}\dots 60^{\circ}\text{C}$  ( $\text{RH} < 95\%$ )  
Max height of use: 2000 m

### PROTECTION FEATURES

- Reverse polarity
- Over-temperature
- Over-Voltage

### DIMENSIONS

150 mm x 90 mm x 40 mm

### WEIGHT

450 g

### COMPLIANCE

Safety: EN 61010-1, EN 61010-2-031  
Measurements: EN 60891  
Category of measure: CATI 1000V  
Pollution degree: 2