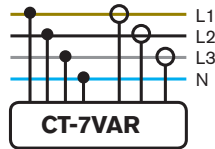


Electrocorder Model: CT-7VAR



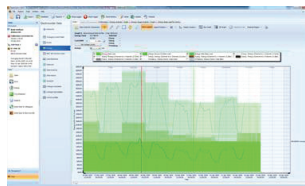
**Three voltage channels
500Vac**

**Three current channels
60Aac, 400Aac**

**One Power Factor
(Cosφ) channel; phase
angle between L1 and A1**

**Complete with Electrosoft
energy analysis software**

**Sealed to IP43 as
standard, available as
IP65/NEMA 12/4**



Records voltage up to 500Vac and loads up to 400Aac per phase.

Data stored in non-volatile memory

Memory capacity of 32,000 (True RMS) values per channel (10bit), up to 300 days continuous recording

Selectable averaging period from 2 seconds to 60 minutes

Accuracy:-

Voltage typically $\pm 1\%$ of reading

Current to typically $\pm 3\%$ of reading

Kit includes data logger, CTs, voltage leads, USB lead, Electrosoft software and a carry case

The advantage of the Electrocorder products over most others is that our Data Loggers constantly sample information (recording the Minimum, Maximum and Average reading) over the set period, many other products only take 'snap shots' of what is going on and can miss 99.9% of the data that is critical to your analysis.

T : +44 (0)870 225 1790
F : +44 (0)870 225 1791
E : sales@acksen.com
acksen.com

Powerfully Measured

Version 3.03.01.14

acksen > Electrorecorder Model: CT-7VAR

The Electrorecorder range is designed to allow electrical engineers cost effectively monitor single and three phase loads. This product will allow voltage, load and reactive power problems to be highlighted quickly for further investigation.

Setting up the Electrorecorder CT-7VAR is easy, suitable for non-technical staff. Using the supplied (free) Windows software, Electrosoft; input the location details for the logging and choose the logging period. Electrosoft will print the necessary dispatch/return documentation including user instructions. All data is included in a database of dispatches and returns, allowing you to track the location of multiple loggers.

Why is the Electrorecorder better than other similarly priced competitors? The Electrorecorder range use a constant sampling technique, unlike the single reading of competitors. When the loggers start to record, they sample every channel 16 times per cycle, a cycle is 16ms at 60Hz and 20ms at 50Hz. At the end of each averaging period, 3 quantities are saved for each channel, the True RMS average, the Max, which is the highest cycle value during the period and the Min, lowest cycle value. This means that it will record all the peaks and troughs which are one cycle or longer.

The voltage and current levels are stored with dates and times. With the back-up battery, the Electrorecorder can continue to record for months.

The recorded data is uploaded to a PC via the supplied USB cable. Using Electrosoft, the recorded current levels, with dates and times that can be viewed in both tabular and graphical form, exported to a spreadsheet or saved to file. Graphs can be printed showing the recorded levels and the allowable tolerance bands. These results may then be discussed with the customer.

On the logger, recording is signified by a flashing green light. A red light advises users that the unit has completed recording.

Allowing you to monitor the loading and energy consumption of the installation. There are many models of Electrorecorder, to suit many logging situations and user's requirements. Power Factor recorded is the phase angle between L1 and A1.

Two models are available. The CT-7VAR-SY has a range of 1Aac to 60Aac, CT-7VAR-FD has a range of 4Aac to 400Aac.

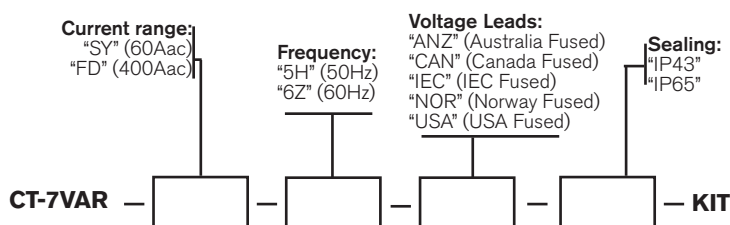
Technical specifications (subject to change without notice)

Recorded values	Vavg, Vmax and Vmin on 3 channels and Iavg, Imax & Imin on 3 channels
Voltage measurement range (Vrms)	5Vac to 500Vrms (Ph - Ph) or 5V to 350Vrms (Ph - N)
Measurement accuracy	±1% of reading, ±1 Volt. (10 bit) within 100Vac-450Vrms (ph-ph); else ±3%. (50/60Hz ±2%)
Maximum channel input voltage	500Vrms (Ph - Ph), 350Vrms (Ph - N) or 850Vpeak
Inputs (non-isolated inputs)	Three phase inputs (L1, L2 & L3) & Neutral (N), Non-isolated input channels
Input socket types	4mm shrouded 'banana' plugs & sockets, each with insulated crocodile clip
Vmax, Vmin, Imax & Imin time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Current measurement range (Irms)	0.5Aac - 40Aac and 4Aac - 400A acfor 400Aac
Current measurement accuracy	Typically ±3% of reading (within 10%-90% of range), otherwise 3% of range
Current Input socket types (all channels)	Hard-wired through cable glands
Sampling frequency (all channels)	16 samples per cycle 800Hz @ 50Hz or 960Hz @ 60Hz
Data recorded	Average, max & min voltage & current values and Power Factor during the averaging period
Power Factor range and accuracy (measured on L1 and A1)	Accurate to ~3% between lead 0.5 and 0.5 lag; ~6% between 0.5 and 0.3 lead or lag
Memory capacity & type	384kB able to record 32,000 values per channel/phase . Non-volatile SEEPR0M
Memory - averaging period & duration	2 sec to 60 min (2 sec gives 4 hrs logging, 60 min gives up to 300 days logging)
Real-time clock accuracy	Greater than 0.001%
Current sensor dimensions	Lead Length 2m/6'6" , Sensor Diameter 30mm (Closed)
Input voltage lead length	Metric 2 metres Imperial/English 6' 6" (6 feet, 6 inches)
Battery life while logging	Unlimited when connected to voltage
Battery type	Loggers contains six 1.5V Alkaline 'AA' batteries (IEC-LR6, ANSI/NEDA-15A)
Communications interface type	USB, optically isolated to 5,2kV
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F. Sealed to IP43 (Optional IP65, NEMA 12/4)
Dimensions & weight	Metric 260 x 180 x 190mm & 2kg Imperial/English - 10" x 7" x 8" & 4lb
Standards	Recording - EN50160: 1994 - 1000 CAT III, 600V CAT IV

Determining product order codes:

To specify your Electrorecorder select various codes and enter into the boxes in order to create a correct product code.

For example: CT-7VAR-FD-5H-IEC-IP43-KIT.



Warranty & calibration

From 2013 all Acksen Ltd products carry a *Lifetime back to base warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing.

*Refer to website for full terms and conditions.

Conformity

Emissions EN55022:1994B, (EN50081-1:1992).
 Immunity EN50082-2:1995, following the provisions of EMC directive 89/336/EEC. Recording std EN50160:1994.
 LVD 72/23/EEC with respect to EN60065. (IEC-61010).
 All models certified (light industrial, 3V/m).