

# AVR-31 Analog Voltage Recorder ILR-31 Current Loop Recorder



Telog's 31 series data recorders simplify your monitoring procedures from set up to data reporting. Battery-operated Telog recorders sample inputs from a variety of sensors, store them in solid-state wraparound memory and print them out in report-ready hardcopies.

A Telog 31 series recorder fits into the palm of your hand or any tight installation site. To put a programmed Telog recorder in service, you need only a convenient location at the recording site and perhaps a couple of screws for mounting. All 31 series recorders are weather resistant and can be placed wherever the sensors are located. The components are sealed in a compartment protected from the elements. Long lasting batteries free you from any site requirements for wires and conduits.

The AVR-31 converts DC voltage inputs into a series of amplitude values and stores them in its solid state memory. At a user specified interval ranging from one second to every eight hours, the recorder can compute and store any of the minimum, average, maximum and/or total values. Applications include: Monitoring energy consumption, plant processes and process parameters, e.g. flow, temperature, pressure, level; recording air quality and environmental parameters, e.g. wind speed, humidity and pH.

The ILR-31 converts current loop inputs into a series of amplitude values and stores them in its wraparound memory. When data averages are selected as part of the statistical analysis program, two types of data totals can be computed: Period and cumulative totals. Some applications are: Process start-up monitoring and environmental parameters, such as flow, temperature, pressure level, humidity and pH.

For more information on this product or other Telog data recording products, call us at **585.742.3000**, email [TelogSales@telog.com](mailto:TelogSales@telog.com), or visit us at [www.telog.com](http://www.telog.com).



**Replace Chart Recorders**

**Large Memory—128Kbtes**

**Rugged, Water Tight**

**Five Year Battery Life**

**Windows® Software Support**

# AVR-31 and ILR-31 Specifications

## Input for AVR-31

Type	DC voltage
Range	100 mv to 20 v
Resolution	0.025% (12 bits)
Accuracy	±0.1% (0° to 50°C) ±0.15% (-25° to 60°C)
Impedance	2 megohms
Absolute max. input	±50 volts
Memory size	80,000 data values (128K RAM)

## Input for ILR-31

Type	DC current
Range	1 ma to 50 ma
Resolution	0.025% (12 bits)
Accuracy	±0.1% (0° to 50°C) ±0.15% (-25° to 60°C)
Loop voltage drop	0.5 volt maximum

## AVR-31 & ILR-31 Series General Specifications

### Recording

Sample rate	4 per second to 1 every 8 hours
Clock accuracy	0.01%
Memory size	80,000 data values (128K RAM)

### Serial Interface

Type	RS-232C compatible, requires RTS
Baud rates	300, 1200, 9600, 19,200; auto-selected
Bit format	1 start, 8 data, 1 stop
Connector	4-pin circular watertight connector

### Power

Battery	one 3.6V, 2.1 Ahr AA Lithium
Operating life	5 years nominal
Battery shelf life	8 years

### Environmental and Mechanical

Temperature	
Operating	-40° to 70°C
Storage	-40° to 70°C
Humidity	5-95%, non-condensing; with short-term complete immersion in water.
Enclosure	
Material	aluminum
Environmental rating	NEMA 4x (IP-65)
Size	3.85" x 2.51" x 1.33"
Weight	1 lb

## Programmable Parameters

Sample rate	1/4 second to 8 hours
Interval period	1 second to 8 hours
Calendar/time	mm/dd/yy; hr:min:sec
Data stored	any combination of the avg., min., or max per interval
Unit ID number	8 alpha-numeric characters

## Support Software

S-3PC	Telogs for Windows
S-3PCL	Telogs for Windows Lite
Data Transfer Unit	IP-67 rated PDA running Palm OS and Telog application program

## Communication

Direct connect	RS-232—IBM-PC compatible computers
Indirect	via Telog Palm Pilot Data Transfer Unit (DTU)

## Computer Requirements

For S-3PC or S-3PCL	IBM compatible computer with a 586/133 MHz or higher processor running on Microsoft Windows 95/98/NT/2000/XP at least 32 MB of RAM, a hard disk with at least 200 MB of free space and a pointing device.
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## Ordering Information

To order analog voltage recorders, use AVR-31-xx, where xx = full scale input range of recorders. For custom or bipolar ranges, please contact Telog.

xx	xx	xx
51	100mv	61 1v 71 10v
52	200mv	62 2v 72 20v
55	500mv	65 5v

To order analog current loop recorders, use ILR-31-xx, where xx = full scale input range of recorders. For custom or bipolar ranges, please contact Telog.

xx	xx
31	0 to 1 ma 42 0 to 20 ma (4 to 20 ma)
35	0 to 5 ma (1 to 5 ma) 45 0 to 50 ma (10 to 50 ma)



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