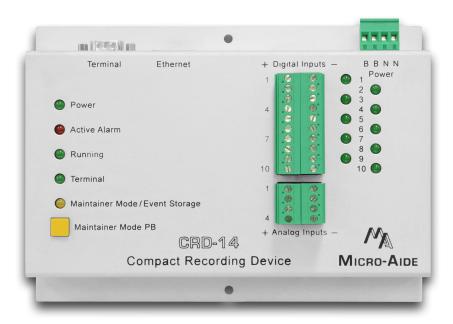
MICRO-AIDE



CRD-14

COMPACT RECORDING DEVICE



FEATURES & CAPABILITIES

- Provides a low cost and easy-to-use recording solution
- ► Compact, portable size
- ▶ 10 Digital and 4 Analog Inputs
- ▶ 8 Virtual and 8 Timer Inputs, all programmable
- ► Memory capacity of 307,123 records
- ► Records stored for up to 128 days
- Non-volatile flash memory, no internal batteries required
- ► Real-time clock drift of less than ±8 sec. per month
- Automatic Daylight Saving Time adjustment
- Precise flash rate reporting
- ► Optional Ethernet Port
- ► Minimum 3800 Vdc and 2000 Vac of isolation

SPECIFICATIONS

Physical

Size

Length: 8.2" Height: 5.9" Depth: 2.6" Weight

Environmental

Storage

Temperature: -50 °C to 85 °C Humidity: 0 to 95%, non-condensing

Operating Environment Temperature: -40 °C to 72 °C Humidity: 0 to 95%, non-condensing

Mounting

Shelf or backboard

Construction

Chassis

Fully enclosed, anodized aluminum

Externally accessible LEDs and connectors

All components mounted on conformal coated, internal PCB

Power Voltage

Range: 9 to 36 Vdc Consumption Maximum: 2W

Isolation

Power

Minimum: 3800 Vdc from B and N terminals to chassis and inputs

Digital Inputs

Minimum: 3800 Vdc to any terminal

Analog Inputs

Minimum: 3800 Vdc to any terminal

Input to Adjacent Input

Digital: minimum 3800 Vdc Analog: minimum 3200 Vdc

Capacities

Inputs

Digital: 10, all opto-isolated Analog: 4 total, DC voltage only Virtual: 8, user assigned

Timer: 8, user assigned **Event Storage**

307,123 records, expandable to 1,274,611 records

Digital Inputs

Input Impedance

10KOhms minimum, opto-isolated

Range

On State: 9 to 36 Vdc Off State: 0 to 2 Vdc **Event Validation Times**

.001 to 32.767 seconds, compatible with fixed rate

flashing circuits

Analog Inputs

Input Impedance

10M Ohms minimum

Range

1 scale, +51.1 Vdc

Typical Accuracy

.15 Vdc

High and Low Limit Values

0 to 51.1 Vdc in multiples of .1 Vdc

Filtering

2 settings, fast and slow

Virtual Inputs

Definitions

Any logical association shared by 1 to 4 variables (i.e., Digital, Analog, Timer or Virtual Inputs)

Assigned by defining the state of the Virtual Input for each combination of variable states

Reporting

Creates standard Event Records

Timer Inputs

Programming

Any input can be assigned as a trigger or terminat-

ing source

On or Off events can be assigned as a trigger or terminating source

High and Low Limit Values

0.0 to 999.9 seconds in multiples of .1 seconds

Reporting

Measured Time is reported in each Timer Input

Event Record

Violation of Limit Values are also reported

Temperature Sensing

High and Low Limit Values

-67°F to 257°F

Usage

Saves Event Record when internal temperature crosses either Limit Value

Memory

Type

Non-volatile, Event Records and Setup Database

are stored in flash memory chip

Newest data over-writes oldest data, 129th day over-writes first day

Storage Longevity

Infinite with power off

Rated for 100,000 write operations

Connectors

Power, Digital and Analog Inputs Detachable, tension clamp, 12 to 22 AWG

Terminal Port

DE-9 male, configured as modified DCE

Ethernet Port (optional)

RJ-45 female

Ports

RS-232

Quantity: 1, for use with a PC, set for ANSI termi-

nal emulation

Terminal Emulation: ANSI Baud Rates: 300 to 115,200

Rit Format: 8-N-1 Ethernet (optional) Type: 10/100 Base-T

Protocols: TCP/IP, Telnet, SNTP-Multicast

Usage: Provides remote or local access via TCP/IP

Data transfer rates of 850 Kbps

User assignable IP Address, Telnet port, sub-net mask

Indicators and Controls

System Status LEDs (5)

Power: green

Active Alarm: red, illuminates when one of more

Alarm Inputs are On

Running: green, flashes once per second to indi-

cate processor is running

Terminal: green, flashes with send and receive

Maintainer Mode/Event Storage: yellow, on when Maintainer Mode is active; blinks momentarily when

an Event Record is logged to memory

Input Status LEDs (10) Digital Inputs 1-10: green, illuminates when input

Ethernet Port LEDs (2 optional) Green: link established

Yellow: data activity

Maintainer Mode Pushbutton

Enables and disables Maintainer Mode

Internal Clock

Accuracy

Typical: ±8 seconds per month (3ppm)

Resolution

.001 seconds for all Event Records

Volatility: maintains accuracy for minimum of

30 days with loss of power

Sync

SNTP-Multicast (with Ethernet option)

Time Zones: selectable from 7 different North

American settings

Daylight Saving Time: enable or disable automatic

adjustment

Leap Year: automatically adjusted

Password Protection

Administrative Level

Access: unrestricted to all functions

Length: 8 characters

Restricted Level Access: Event Record and Setup Database view-

ing only

Length: 8 characters

MICRO-AIDE reserves the right to make changes, at its sole discretion, to any specification listed herein.

