

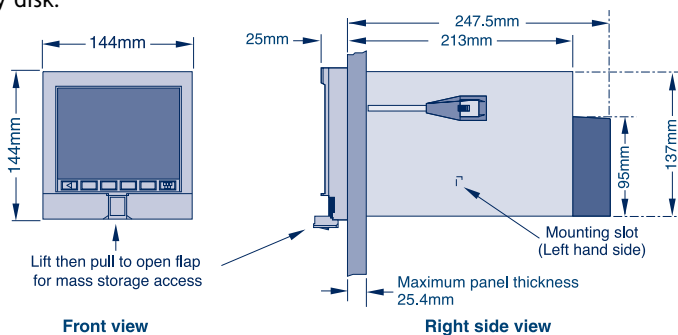
# 5100V 100mm Networked or Standalone Graphic Data Management Unit



The 5000 Series of recorders is designed to acquire process data and then to display, transfer and manage that data using secure yet flexible means. Communication via Ethernet makes them an industry standard networking tool. All 5000 instruments store data in a proprietary, tamper-proof format to ensure complete security and integrity of data.

Taking up to 12 freely configurable inputs, the 5100V has high visibility bar graph, trend, numeric and configurable, user defined displays. Its full color, touchscreen display provides a simple and intuitive operator interface.

Review Lite software is included with all 5000 Series recorders. For use on a PC, Review enables data to be displayed, analyzed and printed and, if required, forwarded in a CSV format. Review software can obtain data from a 5000 instrument using File Transfer Protocol over Ethernet or by using the removable PCCard or floppy disk.



## Options

**Groups** – allows inputs to be viewed and archived in a strategy that suits the process. With six Groups available this option also allows multiple batches to be recorded.

**Batch 5000** – enables batch logging to be started/stopped by the operator with process specific data being recorded, incl. operator name, time/date and up to six configurable batch specific fields.

**Screen Builder** – create up to six custom User Screens to make a specific display to meet process needs. HMI capability via Master Comms option.

**Bridge 5000** – Available in two versions, **Lite** and **Full**. **Bridge Lite** provides the user with remote, live viewing of the data from a PC anywhere. **Full Bridge** gives total access to the 5100V including viewing of data, operation and configuration.

**Maths, Totalizers and Counters** – up to 36 extra channels to further manage process data.

**Timers** – 12 timers to automatically sequence and trigger events.

**Auditor** – for the ultimate in data security and traceability, Auditor Features provide additional security management features designed for compliance with 21 CFR Part 11. Includes: Secure Audit Trail; Electronic Signatures; Signature Control Elements, and Recorded Logins.

**Log Scales** – Scales and gridlines can be set to a Log Scale with scientific notation

**Master Comms** – Up to 16 instruments can be connected using Ethernet and/or serial Modbus comms.

**E-mail** – send user defined e-mails and SMS messages via a job or demand.

**Portable** – General portable, Thermocouple portable and HTM2010 Portable Kit available.

## Features

- 1/4 VGA TFT color display
- touchscreen interface
- high noise rejection and isolation
- up to 12 freely configurable input channels
- up to 12 changeover relays
- 125ms parallel sampling
- Ethernet communications
- Modbus TCP
- client and server File Transfer Protocol as standard
- time synch using Simple Network Time Protocol (SNTP)
- RS232/485 serial comms option
- data archiving over Ethernet or to PCCard / floppy disk
- Review software as standard
- 5.5Mbyte internal Flash for storage of process data
- adaptive recording
- 24 configurable messages
- isolated transmitter PSU
- 12 event inputs

## Specifications

### Input types:

Dc mV, dc V, dc mA, contact

Thermocouple: B, C, D, E, G2, J, K, L, N, R, S, T, U, Ni/NiMo, Platinel, RTD (2/3-wire)

PT100, PT100A, PT1000, Ni100, Ni120, Ni1000, JPT100, Cu10, Cu53, 4 configurable user linearizations

### Max power consumption:

100VA

### Temperature limits:

Operation 0-50°C

### Humidity limits:

Operation 5 to 80% RH non-condensing

### Literature:

HA027125 5000 Series Brochure

HA027852 5000 Series Specification Sheet

HA027647 5000 and 21 CFR Part 11

HA028136 Master Communications



# Ordering codes

## Recorders and Data Management Equipment

5100V	1	2	3	4	5	6	7	8
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### 1 Number of Channels

00	0 channels
06	6 channels
12	12 channels

### 2 Power Supply

VH	90-264Vac, 45-65Hz
VL	20-42Vac RMS, 20-54Vdc (note 2)

### 3 Archive Media

FDD	1.44Mb floppy disk
PCC	PCMCIA

### 4 Memory Card Size

NONE	No memory card supplied
016M	16Mb Flash ATA PCCARD
032M	32Mb Flash ATA PCCARD
064M	64Mb Flash ATA PCCARD
256M	256Mb Flash ATA PCCARD

#### NOTES:

- 1 A maximum of 4 option pcbs are available.
- 2 Isolated Transmitter PS is not available with VL option or selected Portable versions.
- 3 Includes case, Pressure transducer, T/C insertion tubes, Isolated Transmitter PS. VL option not available.
- 4 Portable options require Black Case.

### 5 Portable Options

PANELMT	Panel mounting
PORTGEN	General portable
PORTTTC	Type T T/C Portable
PORTKTC	Type K T/C Portable
PORTJTTC	Type J T/C Portable
PORTVTTC	Volts I/P portable

### 6 Case and Door Color

GRN	Eurotherm green
GRY	Grey
BLK	Black
RAL	RAL7032

### 7 Customer Label Set

USA	Eurotherm USA
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### 8 Non Standard

XXXXXX	Non standard option
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- 5 Total number of Maths, Totalizers and Counters must equal number of selected channels (Field 19)
- 6 Calibration Certificates are available through our Service Dept. and are traceable to NIST.
- 7 If validation is required, the addition of a user screen (Field 25) will fall under Category 4 of the GAMP procedures.

9	10	11	12	13	14	15	16	17	18
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### 9 24V Isolated Transmitter Power Supply

NOITPS	None
115TPS	110-120V 3 channel TPS (note 2)
230TPS	220-240V 3 channel TPS (note 2)

### 10 Anti Glare Screen Coating

NONE	None
MATT	Anti glare screen

### 11 Relays Change Over in Alarm (Note 1)

00	0CO Relay O/P (0 pcb)
03	3 CO Relay O/P (1 pcb)
06	6 CO Relay O/P (2 pcb)
09	9 CO Relay O/P (3 pcb)
12	12 CO Relay O/P (4 pcb)

### 12 Serial Communications (Note 1)

NONE	None
R232	RS232 Serial comms
R485	RS485 Serial comms

### 13 Analog Output

00	None
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### 14 Event Input

00	None
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### 15 Qty of Shunts

00	Qty of shunts (0-12)
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### 16 Shunt Value

NOS	No shunts
100	100 ohm shunts
250	250 ohm shunts

### 17 Qty of 100:1 Attenuators

00	Qty of attenuators (0-12)
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### 18 Calibration Certificate

NOCAL	None
06CAL	6 Ch calibration certificate
12CAL	12 Ch calibration certificate

19	20	21	22	23	24	25	26
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### 19 Maths, Totalizers & Counters

MTC00	None
MTC12	12 Channel maths, totalizers & counters (note 5)
MTC36	36 Channel maths, totalizers & counters (note 5)

### 20 Maths

00	Number of Maths Ch (0-36) (note 5)
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### 21 Totalizers

00	Number of Totalizers Ch (0-36) (note 5)
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### 22 Counters

00	Number of Counters Ch (0-36) (note 5)
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### 23 Groups

6GROUP	6 Groups
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### 24 Batch

NONE	None
BATCH	Batch

### 25 Screen

NONE	None
06SB	Screen builder - 6 user screens

### 26 Timers

NOTIMER	None
12TIMER	Timers (12)

27	28	29	30	31	32	31
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### 27 Bridge

NONE	None
LITE	Viewing bridge
FULL	Full operation/ configuration bridge

### 28 Auditor

NONE	None
AUDIT	Auditor Features

### 29 Log Scales

NONE	None
LOGS	Log scales

### 30 Modbus Master Comms

NONE	None
MODBUS	Modbus Master Comms

### 32 Review

RLITE	Review Lite (default)
RFULL	Review Full