

# Introducing DataVU



## The New Range of Paperless Recorders from Partlow



## DataVU - A New Generation in Recorders

Parlow is excited to introduce DataVU, a new generation in recorders. The range includes DataVU 5, an affordable and user friendly entry level paperless recorder and DataVU 7, an advanced recorder offering a high level of functionality to its users. The recorders are ideal for use in **industrial and scientific processes** such as **food and beverage, life science and heat treatment**.

### DataVU 5

The DataVU 5 paperless recorder is designed to provide a **fast and easy set up** through user friendly controls.

### Save time and money through easy and fast configuration

Set up is so **simple** that it can be carried out on the spot via the front panel without the need for a PC. Configuration is carried out using a combination of fixed keys and menu led soft keys. Three fixed keys allow the user to easily locate and return to master control options.

DataVU 5 provides a graphical, on screen guide to the key functionality within each screen page to **lead the user** through the options available.



A legend is displayed on screen to clearly indicate the **five soft keys' purpose** within the menu option.



The **intuitive set up menu** is so logical that a user can program the desired functionality without requiring an instruction manual. This not only saves time but also **minimises demand** on highly skilled personnel.

Alternatively for those that prefer to use a PC to configure their recorder or for multiple recorders to be configured, the DataVU 5 can be set up remotely using a CompactFlash card or via communications. This is particularly **time efficient** when the same configuration profile needs to be set up on multiple devices.

## DataVU 5 provides a first class 5" TFT colour display for viewing data.

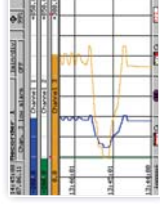
DataVU 5 has a TFT display for high image quality, this provides excellent levels of contrast for **improved visibility** and the 320 x 240 pixel screen provides **sharp definition** for images and information to be clearly viewed.

The screen supports **wide viewing angles** with minimal colour distortions and loss of contrast making it ideal for use in all **industrial environments**.

Data can be displayed and analysed through a variety of different display screens. These include:



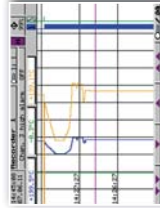
**Numerical Display**  
Key data information can be highlighted by using the larger numerical display.



**Graphical Display**  
Displays data from analog channels and/or event traces. Scaling and limit markers are displayed for the channels.



**Event Report**  
Important events are detailed in plain text on the report for ease of reading and to simplify interpretation (alarm messages, external texts and system messages)



**Historical Display**  
Stored data can be scrolled through using the soft keys, with the ability to zoom in on a specific moment in time.

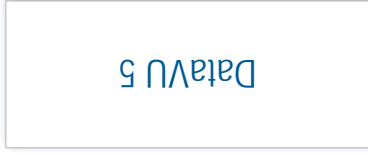
## Features

**Inputs/Outputs**

- Thermocouple
  - RTD
  - Voltage
  - Current
- 3 or 6 channel recorder
- 4 binary inputs
- 3 relay outputs

**Power Supply**

- 110 - 240V AC or
- 20 - 53 AC/DC



**HMI**

- 5" TFT Colour Screen (144mm x 144mm)
- 320 x 240 pixels

**Memory**

- CompactFlash card
- ≤ 2GB for transfer of measurements and configuration of paperless recorder
- CPU card with main memory and measurement data memory (FLASH memory) for approx. 350,000 measurements

## DataVU 7

DataVU 7 provides **advanced flexibility** to meet a user's specific requirements without the need to change a process to fit the recorder. If process requirements are subject to change at a later date then the user benefits from the ease with which modifications can be made to the recorder configuration. The recorder is **fully scalable** - cards can be added to the recorder, **facilitating future expansion**.

Reporting can be tailored to provide the exact information needed. The DataVU 7 allows reports to be created for daily, weekly, monthly and yearly periods. Furthermore if particular data needs to be evaluated then reports can be created using a custom date range to provide maximum flexibility.

### Quality problems in production can be minimized with batch logging.

**Batch logging** is possible for up to three batches simultaneously, independently of each other. The measured data is protected and retained even after a power interruption, preventing loss of important data. Batch entry is also possible using a barcode scanner which is effective in **eliminating input errors**.

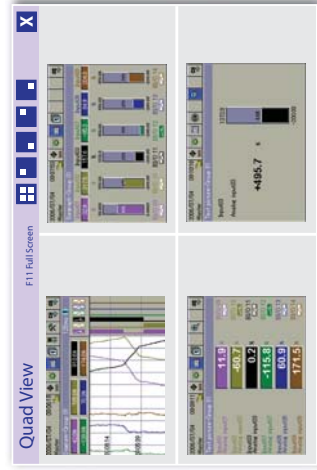


For further **customisation** a user can create **individual comments** against a report or display. Adding reference information allows greater meaning and relevancy to be attached to the data being viewed.

### Personalise the data presentation screens with annotated comments.

The Ethernet web server connection for DataVU 7 enables the simultaneous display of all analog and digital I/O on a web page. Additionally it provides the option to view up to four visualisations for one or more recorders concurrently online.

To aid data being presented in a **meaningful** way relating to the specific process, a user can create three different customised html pages for the data to be visualised within. To tailor the presentation of data to the specific application, the user can create a **personalised process image** upon which reliable data can be viewed. This helps to demonstrate the applicability of the data being shown.



## DataVU 7 is a robust and durable recorder that is ideally suited to challenging and harsh environments.



The recorder can withstand demanding environmental conditions and meets standards for **IP65 ingress protection**. It can also endure abrasive substances in its surroundings as it is **easy to clean**, even with aggressive media.

The **practical control knob** has been designed so that a user can set up and configure the recorder on the spot even while wearing protective gloves.



DataVU 7 delivers **enhanced security** to its users through its options for password protection. It ensures that the instrument can only be configured by **authorised operating personnel**. To further safeguard data, it is stored in an **encrypted form** and validated by **electronic signatures**, making it compliant with 21CFR PT11\*.

DataVU 7 provides upper and lower level **alarms** for analog inputs. Limits are set and an alarm is activated if the value falls outside of the set range.

The recorder provides complete **peace of mind** as it can automatically adjust the recording speed to provide a **comprehensive, clear process picture** for analysis if an alarm is triggered.

\*Coming soon. Please contact a member of the sales team for more information.



## Peace of mind - DataVU 7 adjusts the recording speed if something is wrong to provide a comprehensive, clear process picture.

## Features

DataVu 7

<p><b>Inputs/Outputs</b></p> <ul style="list-style-type: none"> <li>• 24 binary inputs/outputs max.</li> <li>• 18 analog inputs/outputs max.</li> </ul> <p>(A maximum of 3 module slots can be fitted with 6 analog inputs or 3 analog inputs and 8 binary inputs/outputs)</p>	<p><b>Power Supply</b></p> <ul style="list-style-type: none"> <li>• AC 100...240V +10/-15%</li> <li>• 48...63Hz</li> <li>• AC/DC 20...30V, 48...63Hz</li> </ul>
<p><b>External Inputs</b></p> <ul style="list-style-type: none"> <li>• Up to 24 analog inputs</li> <li>• Up to 24 binary inputs</li> </ul>	<p><b>Interface</b></p> <ul style="list-style-type: none"> <li>• 1 x Ethernet 10/100 Mbits/sec</li> <li>• 4 x USB interfaces</li> <li>• 1 x RS232/RS485</li> <li>• 1 x RS232 (barcode reader)</li> <li>• 1 x PROFIBUS-DP (option)</li> </ul>
<p><b>Relay Outputs</b></p> <ul style="list-style-type: none"> <li>• 1 relay (standard)</li> <li>• 6 relays (option)</li> </ul>	<p><b>Display</b></p> <ul style="list-style-type: none"> <li>• 5.5" TFT colour display</li> <li>• 320 x 240 pixels</li> <li>• 256 colours</li> </ul>
<p><b>Internal Channels</b></p> <ul style="list-style-type: none"> <li>• 18 x math channels</li> <li>• 18 x logic channels</li> <li>• 27 x counters / integrators</li> </ul>	<p><b>Operation</b></p> <ul style="list-style-type: none"> <li>• Rotary knob or touchpad</li> </ul>
<p><b>Measurement Data Memory</b></p> <ul style="list-style-type: none"> <li>• 256 Mbytes</li> </ul>	<p><b>Software</b></p> <ul style="list-style-type: none"> <li>• Set up program</li> <li>• PC Evaluation software (PCA3000)</li> <li>• PCC Communications software</li> </ul>
<p><b>External Memory</b></p> <ul style="list-style-type: none"> <li>• CompactFlash card to 4GB</li> <li>• USB memory stick</li> </ul>	

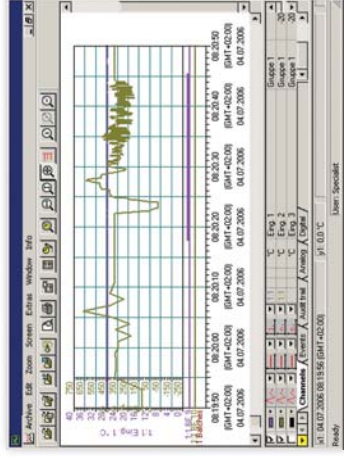
## Additional Modules and Accessories

### Set Up Software

Instrument configuration via the setup PC software can be more convenient than using the instrument keys.

The configuration data can be created on a data medium (CompactFlash card) and read by the recorder, or transferred via one of the communication interfaces. The PC can be used to write settings to a printer.

### Evaluation Software



DataVu works with PC Evaluation Software (PCA3000), a program which runs under Windows 2000/XP/Vista and Windows 7. It can be used to manage, archive, visualise and evaluate the recorder data. Data from multiple and differently configured instruments is recognized by the PC Evaluation Software and stored in an archive database for **future evaluation and traceability**.

Data from any analog or binary channels of a paperless recorder (even from different groups) can subsequently be combined into groups, to enable data to be **easily interrogated**. Since each group is displayed in a separate window, several groups can be shown simultaneously on the screen and compared.

To improve the ability to analyse and compare data it is also possible to restrict the time periods to be evaluated. Using the export filter, it is possible to export the stored data, so that they can be processed in other programs such as **Excel**.

The PC Evaluation Software has **network capability**, enabling several users to obtain data from the same archive file in a network directory, independently of each other.

## Language Capability

Both DataVu 5 and the DataVu 7 come complete with a languages library enabling the user to set the recorder operation to be read in their preferred language. Current available languages include:



## Math/Logic

Up to six math channels are possible on DataVu 5 and up to 18 channels on DataVu 7. The option for math and logic is configurable via the setup software. It combines analog channels with one another, with counters and / or with the binary inputs. The operators available for formulae are: +, -, \*, /, (, ), SQRT(), MIN(), MAX(), SIN(), COS(), TAN(), \*\*, EXP(), ABS(), INT(), FRC(), LOG(), LN(), humidity, moving average or logics.

\*A maximum of six channels on DataVu 5 and 18 channels on DataVu 7 can be saved in the unit in total for both analog + math.

## DataVU Features

		DataVU 5	DataVU 7
HMI	Screen	<b>5" TFT</b>	<b>5.5" TFT</b>
	Rotary knob	<b>X</b>	<b>✓</b>
	Pushbutton operation with soft keys	<b>✓</b>	<b>No</b>
	Touchpad	<b>X</b>	<b>Option*</b>
Inputs and Outputs	Number of internal channels (max.)	<b>6</b>	<b>18</b>
	Number of external channels (max.)	<b>X</b>	<b>24</b>
	Digital inputs (max.)	<b>4</b>	<b>24</b>
	Relay outputs (max.)	<b>3</b>	<b>7</b>
Data	CompactFlash	<b>2GB</b>	<b>4GB</b>
	Scan rate per second (input)	<b>250mS</b>	<b>125mS</b>
Comms	RS232/485 Modbus	<b>Option</b>	<b>✓</b>
	Ethernet	<b>Option</b>	<b>✓</b>
	RS232 barcode reader	<b>X</b>	<b>✓</b>
	USB	<b>X</b>	<b>✓</b>
	Profibus DP	<b>X</b>	<b>Option</b>
Other Functionality	Counters / Integrators (number of channels)	<b>6</b>	<b>27</b>
	Maths (number of channels)	<b>6</b>	<b>18</b>
	Batch (number of reports)	<b>0</b>	<b>3</b>
	Web server	<b>Option</b>	<b>✓</b>
Software	Set up	<b>✓</b>	<b>✓</b>
	Evaluation	<b>✓</b>	<b>✓</b>
	Communication	<b>✓</b>	<b>✓</b>

\*Stainless Steel Option

