

## DATAPAK 700 Resistance Welding Process Monitor



**Versatile resistance welding monitor and data logger/recorder**

### Advanced monitoring for the welding professional

The Datapak 700 can be used as a general-purpose weld meter or as a machine process monitor. By measuring current, time and force and having the capability to interface with individual welding stations, it can supplement and enhance legacy installations or replace existing meters. One of the important advantages of the Datapak is that it provides independent weld monitoring which is not affected by possible malfunctions within welding controls which may otherwise result in welding errors. Up to 64 selectable monitoring programs and a teach facility allow easy set-up. Flexible inputs and outputs allow connection to a wide range of welding control systems. Data from up to 24,500 welds can be stored in memory and all measurements are time and date stamped. Data can be exported via the RS-232 port.

#### Datapak 700 is suitable for the following Applications:-



#### Spot

All types of spot welding, including single, repeat, pulsation, single electrode, multi-electrode, and series welding.

#### Projection

All types of projection welding including multi-projection, annular-ring (spud), single projection and weld nut, including multi-electrode management and dressing.

#### Seam

A special seam welding derivative (DATAPAK 700S) is available specifically for continuous seam welding applications

#### Roll-Spot

Most types of roll – spot welding.

#### Pulsation

Pulsation welding for thick materials.

#### Micro Welding

Alternate half cycle.

#### Multi-weld and Cross Wire

Simple multi-welding, low cost and small size allows one control per transformer.

#### Robot Welding

Suitable for most robot welding applications where Fieldbus or Communications Networks are not required.

#### Headline Features:

Vacuum-Fluorescent Display	:	High visibility
Illuminated push button	:	Easy to use
Compact Rugged Enclosure	:	Machine mountable or semi-portable
Lockable operation	:	Secure set up conditions.
Multi-point calibration	:	Accurate
Weld or component count	:	Process quality control
AC/DC/CD, primary or secondary	:	Versatile monitor methods
64 programs	:	Separate settings for all your components.
Time and date stamped data logging	:	Traceable records.
Serial Port	:	RS232 as standard.

## DATAPAK 700 Resistance Weld Monitor — Feature Table

<b>Standard Features</b>	
Display: 4 x 20 character VFD	
Indicators:	Fault Warn Pass Count
Touch sensitive membrane keypad: 8 keys and 3 indicators	
Key switch:	Position 1 - Bypass Position 2 - Normal Position 3 - Reset/Edit
Air valve connections: 380-480V 50/60 Hz 100-120V 50/60 Hz or 24v DC	
Weld on/off optional—24VDC	
Toroid sensitivity: 100 to 2,000 mV/kA	
CT ratio: 800:1	
Pressure transducer: 0.....10 V dc	
Communications Port: RS232	
Real time clock: h:m:s dd:mm:yyyy	
Data Memory: 24,570 welds Consisting of:	
	Current Time Force Program Counter Status Time Date

<b>Monitor Programs x 64</b>	
Monitor/Teach	
Current	0..60kA
With adapter	0..200kA
Force	0...10 volts
Time	0...99 cycles
or	0...999 ms
Current monitor	On/Off
Force monitor	On/Off
Time monitor	On/Off
Current low limit	0...99%
Current pre-limit	0...99%
Current high limit	0...99%
Pre-limit count	0...99%
Pressure / high limit	0...99%
Actual weld count (0...9999)	
Terminal count (0...9999)	
Continue/Stop at end	
Part checking (On/Off)	
Count all or passes only	

<b>General Information</b>
Blanking On / Off
Primary or Secondary current feedback
Pressure/(2 points, kN / V)
Program select - internal default - external binary

<b>Global Parameters</b>	
<b>Configuration:</b>	
	Mode (AC, DC or CD)
	Frequency 50/60 Hz
	AC blanking On/Off
	DC threshold 0...99%
	Sensor (Toroid/CT)
	Toroid test (On/Off)
	Toroid Scale factor (1...4)
	Force units (kN/lbf)
<b>Calibration:</b>	
	Toroid (100-2000mV/kA)
	CT S/P ratio (1:1...199:1)
	CT S/P offset (-1kA...+1kA)
	Force (2 points, kN/V)
	Analogue output (10V=0...60kA)
<b>Printer:</b>	
	Lines per page
	Format (Table/CSV)
	'Print on' condition:
	All
	Pass Only
	Fail Only
	Off
<b>Clock:</b>	
	Date
	Time

<b>Inputs</b>	
Weld On/Off	
Toroid	100-2000mV/kA
CT	800:1
Force Input	0...10V
Program 1 select	
Program 2 select	
Program 4 select	
Program 8 select	
Program 16 select	
Program 32 select	
Air Valve Trigger Input:	
	A. 380-480 volts @ 50/60 Hz
	B. 100 - 120 V @ 50/60 Hz
	C. 24 V DC
Current Trigger via CT or Toroid	

<b>Outputs</b>
Machine interlock voltage free contact
Analogue output of current
Printer (RS232)

