### INGENIERIA MEXICANA UNIDA

# iPAK2 CPU

Medium Frequency DC constant current control and proportional force control for spot, projection and seam welding applications, up to 6000A primary current, 500,000A secondary current.

#### FEATURES

•256 weld programs (schedules).

•3 weld Intervals — Pre-heat + Main weld + Post heat.

•Cascade / multivalve operation.

•Up to 8 transformers and 8 main valve (WAV) outputs.

•7 auxiliary valves under program control.

•16 Inputs/ 16 Outputs (short circuit protected). Dedicated function.

- •Secondary or Primary current regulation.
- •Ethernet (2 simultaneous connections).

•RS232 Port.

•RS485 Port.

•Analog Port connects to Proportional Valve for weld force control, or can output a measured current waveform. Can also be used for direct analog control function.

•Force profiling.

•Electrode manager (Stepper functions) for up to 8 electrodes.

•Current and force monitor.

•Seam mode—change programs 'on the fly', up to 8 MOTOR command outputs.

•Standard features mode reduces the available options for simple applications.

•Feature and programming format common with EN7000 AC control.

•EtherNet/IP supported via plug-in adapter option.

Comparison of iPAK2 with iPAK	iPAK	iPAK2
Compatible with iPAK inverter	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
Compatible with iPAK2 inverter	<ul> <li>✓</li> </ul>	~
Weld Programs (schedules)	64	256
Weld intervals	2	3
Duty-cycle limiter	×	<b>√</b>
Real-time clock	×	<b>v</b>
Data log entries	64	6144
Direct MUX drive	×	<ul> <li>✓</li> </ul>
Analog control mode	×	<ul> <li>✓</li> </ul>
Safety relay	×	<ul> <li>✓</li> </ul>
Short circuit proof outputs	×	<ul> <li>✓</li> </ul>
Air-valve outputs	2	8
WSP3 programming	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
NetFlash programming	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
Ethernet ports	0	2
RS485 ports	0	1
Commonality with EN7000	×	<ul> <li>✓</li> </ul>



 Mounts directly to IPAK and iPAK2 inverters.

• Pendant, Modbus, NetFlash programming.



Example: Complete iPAK 600A system.



Example: Complete iPAK 600A system with 4 transformer outputs.

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## **iPAK2 CPU**

### **NetFlash PC Soware for Ethernet (opon)**

Easy to use Networked PC. Access iPAK, iPAK2,WS2003, EN7000.

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Electrode			0					Test force	e at end of w	eld2	R	<b>□Firmware update u lity.</b>			
										Low limit -	4	5			



P3 Pendant (opon) Easy, intuive 4 line display

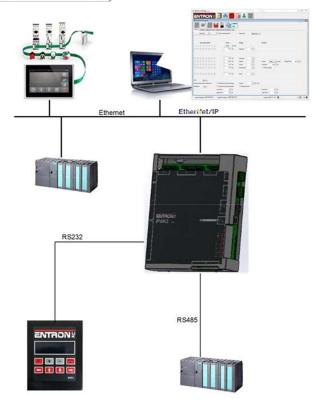
#### **MULTIPLE COMMUNICATIONS SUPPORT :**

Modbus-TCP/IP (Ethernet), Modbus-RTU (RS485), RS232 all built-in. EtherNet/IP and other Fieldbuses supported via plug-in adapter opon.

MULTIPLE CONTROL METHODS: Discrete I/O plus analog 0-10V, Modbus TCP/IP (Ethernet), Modbus-RTU (RS485), EtherNet/IP.

**PROGRAMMING METHODS :** Pendant (RS232), HMI RS485, HMI or PC soware Ethernet TCP/IP, EtherNet/IP.

DATA-LOGGING (Spot mode): Internal data-logging up to 6000 records. Data can be recorded to hard drive through NetFlash.



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