

resistance welding

IPB-5000A

5 kHz Inverter Power Supply

- 5 kHz fast feedback for the best welding control
- Constant current, voltage and power feedback modes address application and process challenges
- Combo mode enables welder to adapt to variances in part fit-up or surface conditions
- Full-color LCD shows all parameter traces for easy understanding of the welding process
- Comparator and envelope functions monitor the weld to ensure quality
- Weld Pre-Check determines resistance prior to the weld



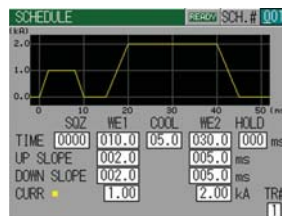
Envelope mode ensures the same resistance change occurs every weld

Miyachi Unitek's IPB Inverter Power Supply delivers superior welding control for a wide range of microjoining applications.

Paired with the ITB-780A6 transformer, this power supply outputs a maximum current of 6000 Amps, making it ideal for most resistive and conductive welding applications. It operates in constant current, voltage or power feedback modes and can also weld in Combo (combination of current and voltage) to address even the most challenging application or process conditions.

The IPB's full-color screen and simple user interface facilitates easy programming of up to 127 weld schedules. A wide range of weld monitoring tools are built-in to the unit for added process control. The Comparator feature allows the operator to set upper and lower limits around the measured value of up to four parameters to assure process consistency. The IPB also has an Envelope function that allows dynamic limits to be set around a monitored waveform to ensure the same resistance change occurs at the same rate for every weld. A pre-check function determines resistance prior to the weld and can abort if it is out of limits, thus saving parts and reducing downtime.

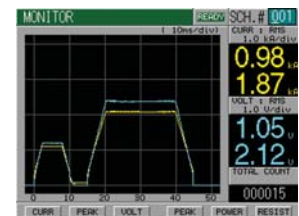
IPB Process Control Functionality



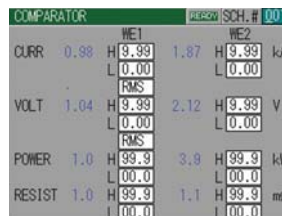
Easy programming of weld parameters



Graphic display of welding variables



Clear numeric measurements and limits



Comparator facilitates 4 simultaneous limits



Multiple waveform and limit views



Pre-Check of resistance prior to welding

Typical Applications



CRT Gun



Motor Armature



Auto Sensor

IPB-5000A Inverter Power Supply Specifications

Available Models:	IPB-5000A/200-240	IPB-5000A/380-480
Transformer Part Number:	ITB-780A6 – Transformer included with system	
Line Voltage, 50/60 Hz:	200 to 240 VAC, 3-Phase	380 to 480 VAC, 3-Phase
Primary Current:	200 Amps	
Primary Frequency:	5 kHz	
Feedback Modes:	Secondary Constant Current, Secondary Constant Voltage, Secondary Constant Power, Combination Mode	
Current Setting Range:	0.6 to 4.0 kA	0.6 to 6.0 kA
Voltage Setting Range:	0.30 to 9.99 V	
Power Setting Range:	0.2 to 13.3 kW	0.2 to 20.0 kW
Weld Schedules:	127	
Cooling Method:	Internal Fan	
Monitor Modes:	Pre Weld Check, Comparator, average / peak (4 allowed). Envelope (single parameter).	
Valve Voltage:	24 VDC	
Time Setting Range:	Squeeze Time: 0000 to 9999 ms (1.0 ms increments) Upslope 1 & 2: 000.0 to 100.0 ms (0.2 ms increments) Weld Time 1 & 2: 000.0 to 100.0 ms (0.2 ms increments) Downslope 1 & 2: 000.0 to 100.0 ms (0.2 ms increments) Cool Time 00.0 to 98.8 ms (0.2 ms increments) Hold Time: 000 to 999 ms (1.0 ms increments)	
Inputs / Outputs:	Inputs: Weld On / Off; Weld Interrupt (weld to displacement); Program Protect; Count Reset; Remote Schedule; Parity (WE1 Stop); Error Reset; 2 Level Start; Emergency Stop Outputs: Good / NG (no good); Count UP; Ready; End; Solenoid 1 & 2; Caution	
Operational Environment:	Temperature 5-40° C / Humidity 90% or less (no condensation).	

ITB-780AG Welding Transformer Specifications (Included with System)

Rated Capacity:	17.4 kVA
Input Voltage:	Selectable for all IPB-5000A's
Frequency:	5 kHz
Secondary Volts, No Load:	13 V
Max Secondary Current:	6 kA
Max Duty Cycle:	2.5% at 6 kA
Cooling Method:	Internal Fan

Specifications:	Power Supply	Transformer
Dimensions (H x W x D) Inches (mm):	10.59 (269) x 6.77 (172) x 15.35 (390)	7.20 (183) x 7.48 (190) x 14.8 (376)
Weight - Lbs (Kg):	33 (15)	28 (13)

Your Local Representative



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