

UFUltraFlex

INDUCTION HEATING SYSTEMS

ADVANTAGES

Ultraflex SmartPower[™] Compac Systems are a breakthrough innovation in the induction heating technology, featuring the Direct Digital Step[™] control algorithm and a unique configurable modular approach.

- Configurable and field upgradable power supplies with output power from 50kW to 400kW.
- Wide output frequency range two ranges available from 6kHz to 60kHz and from 40kH to 200kHz.
- Zero down time can be achieved if additional module (N+1) is installed in the system.
- Latest SiC transistor technology and proprietary digital control algorithms ensure optimal performance and maximum efficiency in a wide frequency range.
- Ultra-flexible, wide range load impedance matching by utilizing multiple transformer ratios and configurable capacitor banks.
- Configurable to work with a single or multiple, independently controlled RF outputs from one cabinet.
- Can operate with optional heat stations allowing the load coils to be placed remotely.
- Durable and reliable design with built-in tuning, safety and diagnostics features.

Operation

- Precise power control from 0 to 100% of rated power
- Output regulation: Voltage, Power, Current
- Parameter Monitoring: Current, DC Volts, Output Volts, Power, Frequency
- Control modes: Automatic, Remote or Local control
- RF Amplifier modules operating in a wide frequency range (5kHz – 200kHz)
- Automatic frequency scanning and load tuning
- Fast dynamic response and ramp-up time for short heating cycles
- Variable ratio transformer for matching to a wide range of loads and coils

User Interface

- Industrial control panel 12" LCD touch, full color
- Advanced and intuitive user interface
- Multiple heating programs and profiles for automatic process control
- High accuracy cycle-by-cycle energy monitoring
- Built-in temperature control and monitoring features
- Data logging of process and operating parameters

Control

- 0-10V or 4-20mA external control and remote Start/Stop operation
- Ethernet and USB connectivity for firmware upgrades and diagnostics
- RS232/485 (MODBUS) serial interface for remote control and monitoring









SMART POWER COMPAC SPECIFICATIONS:

SMARTPOWER SYSTEM MODEL	USP-	C-100	USP-0	C-200	USP-C-400		USP-CD-100	
Description	Single Output		Dual Output		Quad Output		Single Output	
	Full Rack		Full Rack		Full Rack		Double Rack	
Number of PA Modules	2 - 8		2 - 8		2 - 8		10 - 16	
RF Outputs	1		2		4		1	
Power Amplifier	MF	WF	MF	WF	MF	WF	MF	WF
Type	25/60	25/200	25/60	25/200	25/60	25/200	25/60	25/200
Frequency Range	6-60 kHz	40-200 kHz	6-60 kHz	40-200 kHz	6-60 kHz	40-200 kHz	6-60 kHz	40-200 kHz
Output Power Range	50 kW		50 kW		50 kW		250 kW	
	(2x25kW Modules)		(2x25kW Modules)		(2x25kW Modules)		(10x25kW Modules)	
	to		to		to		to	
	200 kW		200 kW		200 kW		400 kW	
	(8x25kW Modules)		(8x25kW Modules)		(8x25kW Modules)		(16x25kW Modules)	
AC Line, VAC 3-phase (50/60Hz)	380/480±10%		380/480±10%		380/480±10%		380/480±10%	
Dimensions	23.6″x28.3″x72″		23.6″x28.3″x72″		23.6″x28.3″x72″		47.2″x28.3″x72″	
(WxDxH)	(600 x 720 x 1820mm)		(600 x 720 x 1820mm)		(600 x 720 x 1820mm)		(1200 x 720 x 1820mm)	
Weight	400lb – 660lb		400lb – 660lb		400lb – 660lb		1050lb – 1320lb	
	(180kg - 300kg)		(180kg - 300kg)		(180kg - 300kg)		(480kg - 600kg)	

REMOTE HEAT STATION MODEL	HSP-50M	HSP-100M	HSP-200M	HSP-50W	HSP-100W
Output Power Range	40kW – 50kW	50kW – 100kW	100kW-200kW	40kW - 50kW	50kW - 120kW
Frequency Range	6 – 60 kHz	6 – 60 kHz	6 – 60 kHz	40 – 200 kHz	40 – 200 kHz
Dimensions (WxDxH)	15″ x 25″ x 19″ (375 x 632 x 485 mm)	15″ x 25″ x 19″ (375 x 632 x 485 mm)	15″ x 25″ x 19″ (375 x 632 x 485 mm)	15″ x 25″ x 19″ (375 x 632 x 485 mm)	15″ x 25″ x 19″ (375 x 632 x 485 mm)
Weight	176 lb. (80kg.)	200 lb. (90kg.)	215 lb. (98kg.)	176 lb. (80kg.)	200 lb. (90kg.)

HEADQUARTERS

158-2 Remington Blvd Ronkonkoma, New York 11779 Tel: 631.467.6814 sales@ultraflexpower.com



ultraflexpower.com



