

# Welding Power Supplies



**SANARG 185AP  
SANARG 200AP  
SANARG 300AP  
SANSTICK 400S  
SANMIG 400M**

**SANREX CORPORATION**



# Welding Power Supplies

**SANARG 185AP / SANARG 200AP / SANARG 300AP / SANSTICK 400S / SANMIG 400M**

## For All model

- Compact and lightweight design
- Easy operation
- Dual input voltage capable 230/460 (Except SANARG 185AP)
- LIFT-TIG standard in all models  
Reduces sticking at short circuit while providing excellent arc start
- Remote control supported
- Keeping cool when needed  
Fan speed slows to reduce energy consumption and dirt ingress
- Self-diagnostic codes displayed on front panel

## For TIG mode

- Superb arc starting performance
- Flexible adjustment parameters (Pulse Frequency, Pulse Width, AC Frequency, Cleaning Width)  
enable welding a large variety of materials with ease
- Superior AC arc stability produces excellent weld beads (For AC TIG mode)

## For STICK mode

- VRD (Voltage Reducing Device) installed to ensure safety
- E6010 capable
- Variable Arc control (Inductance) suppresses sticking and maintains a stable arc length  
(For SANSTICK 400S and SANMIG 400M)

## For MIG mode

- Optimal waveform control reduces spatter that produces a superb weld bead on steel and stainless
- Controls the wire tip condition at the end of the weld to enhance the start of the next weld



# SANARG 185AP

## Processes:

STICK (SMAW)  
TIG (GTAW) Lift,  
HF and Pulse

## Applications:

Aerospace  
Repair/ Maintenance  
and Installation  
Food and Beverage  
Dairy  
Fabrication



# SANARG 200AP

## Processes:

STICK (SMAW)  
TIG (GTAW) Lift,  
HF and Pulse

## Applications:

Aerospace  
Repair/ Maintenance  
and Installation  
Food and Beverage  
Dairy  
Fabrication



PARAMETERS		SANARG 185AP				SANARG 200AP				
MODEL		IA-1850TP-U1E				IA-2000TP-U1E				
Description		AC/DC HF TIG, LIFT TIG, STICK				AC/DC HF TIG, LIFT TIG, STICK				
Rated output		185 A at 18 V, 30% Duty Cycle (TIG)				200 A at 18 V, 20% Duty Cycle (TIG)				
Welding Mode		Input Power	40% Duty Cycle	60% Duty Cycle	100% Duty Cycle	Input Power	40% Duty Cycle	60% Duty Cycle	100% Duty Cycle	
Output Current/ Voltage	TIG	208-230 1Ø	160 A @ 17 V	130 A @ 16 V	100 A @ 14 V	208-230/460 1/3Ø	160 A @ 17 V	130 A @ 16 V	100 A @ 14 V	
	STICK	208-230 1Ø	160 A @ 27 V	130 A @ 26 V	150 A @ 24 V	208-230/460 1/3Ø	160 A @ 27 V	130 A @ 26 V	150 A @ 24 V	
Open Circuit Voltage		Approximately 65 V at 230 VAC input Approximately 18 V with low OCV circuitry enabled				Approximately 65 V at 230 VAC input Approximately 18 V with low OCV circuitry enabled				
Output Current Range	TIG	5 – 185 A (DC Mode) 10-185 A (AC Mode, 60 Hz, 50% cleaning)				5 – 200 A (DC Mode) 10 – 200 A (AC Mode, 60 Hz, 50% cleaning)				
	STICK	5 – 160 A (DC Mode) 10 – 160 A (AC Mode, 60 Hz, 50% cleaning)				5 – 160 A (DC Mode) 10 – 160 A (AC Mode, 60 Hz, 50% cleaning)				
Input/ Output at Rated Load		Single-phase				Three-phase		Single-phase		
		Voltage	Current			Voltage	Current	Voltage	Current	
Rated Input Voltage/ Current	208	44	208			20	208	44		
	230	40	230			19	230	40		
						460	10	N/A	N/A	
Output Amperes		160		160		160				
Output Volts		27		Input at No Load		27		27		Input at No Load
KVA		9		0.5		7.2		9		0.5
KW		5.4		0.13		5.4		5.4		0.13
Input										
Input Voltage		208 – 230 VAC 1-Phase				208 – 230 / 460 VAC 3-Phase, 208 – 230 VAC 1-Phase				
Line Frequency		50 / 60 Hz				50 / 60 Hz				
Line Volts Compensation		+ / – 10%				+ / – 10%				
Input Cable		AWG 10/3 SOOW with 6-50P, approximately 10 feet long				AWG 12/4 SOOW, approximately 10 feet long				
Dimensions (W × H × L)		7.08 in (180 mm) × 14.76 in (375 mm) × 16.53 in (420 mm)				7.08 in (180 mm) × 14.76 in (375 mm) × 16.53 in (420 mm)				
Weight (with cable)		37 lb. (17 kg)				38 lb. (17 kg)				



# SANARG 300AP

## Processes:

STICK (SMAW)  
TIG (GTAW) Lift,  
HF and Pulse

## Applications:

Aerospace  
Repair/ Maintenance  
and Installation  
Food and Beverage  
Dairy  
Fabrication  
Construction  
Industrial Manufacturing



# SANSTICK 400S

## Processes:

STICK (SMAW)  
TIG (GTAW) Lift  
MIG (GMAW) \*\*  
Flux Core (FCAW) \*\*  
Air Carbon Arc Gouging  
(CAG)

## Applications:

Fabrication  
Construction  
Repair/ Maintenance  
and Installation  
Industrial Manufacturing



\*\* External Voltage Sensing Wire Feeder required, set to CC mode

PARAMETERS		SANARG 300AP				SANSTICK 400S			
MODEL		IA-3000TP-U1E				ID-4000S-U1E			
Description		AC/DC HF TIG, LIFT TIG, STICK				DC STICK, DC LIFT TIG			
Rated output		300 A at 32 V, 25% Duty Cycle (STICK)				400 A at 36 V, 25% Duty Cycle (STICK)			
Welding Mode		Input Power	25% Duty Cycle	60% Duty Cycle	100% Duty Cycle	Input Power	40% Duty Cycle	60% Duty Cycle	100% Duty Cycle
Output Current/ Voltage	TIG	208-230/460 1/3Ø	300 A @ 22 V	190 A @ 18 V	150 A @ 16 V	208-230/460 3Ø	400 A @ 26 V	300 A @ 22 V	200 A @ 18 V
						208-230 1Ø	300 A @ 22 V	190 A @ 18 V	150 A @ 16 V
	STICK	208-230/460 1/3Ø	300 A @ 32 V	190 A @ 28 V	150 A @ 26 V	208-230/460 3Ø	400 A @ 36 V	300 A @ 32 V	200 A @ 28 V
						208-230 1Ø	300 A @ 32 V	190 A @ 28 V	150 A @ 26 V
Open Circuit Voltage		Approximately 65 V at 230 VAC input Approximately 18 V with low OCV circuitry enabled				Approximately 65 V at 230/460 VAC input Approximately 18 V with low OCV circuitry enabled			
Output Current Range	TIG	5 – 300 A (DC Mode) 10 – 300 A (AC Mode, 60 Hz, 50% cleaning)				5 – 400 A			
	STICK	5 – 300 A (DC Mode) 10 – 300 A (AC Mode, 60 Hz, 50% cleaning)							
Input/ Output at Rated Load		Three-phase		Single-phase		Three-phase		Single-phase	
		Voltage	Current	Voltage	Current	Voltage	Current	Voltage	Current
Rated Input Voltage/ Current		208	45	208	97	208	67	208	97
		230	41	230	87	230	61	230	87
		460	21	N/A	N/A	460	31	N/A	N/A
Output Amperes		300		300		400		300	
Output Volts		32		32		36		32	
KVA		16		20		24		20	
KW		12		12		18		12	
Input									
Input Voltage		208 – 230 / 460 VAC 3-Phase, 208 – 230 VAC 1-Phase				208 – 230 / 460 VAC 3-Phase, 208 – 230 VAC 1-Phase			
Line Frequency		50 / 60 Hz				50 / 60 Hz			
Line Volts Compensation		+ / – 10%				+ / – 10%			
Input Cable		AWG 8/4 SOOW, approximately 10 feet long				AWG 8/4 SOOW, approximately 10 feet long			
Dimensions (W × H × L)		8.26 in (210 mm) × 17.12 in (435 mm) × 17.71 in (450 mm)				8.26 in (210 mm) × 17.12 in (435 mm) × 17.71 in (450 mm)			
Weight (with cable)		53 lb. (24 kg)				47 lb. (21 kg)			



# SANMIG 400M

## Processes:

**STICK (SMAW)**  
**TIG (GTAW) Lift**  
**MIG (GMAW) \***  
**Flux Core (FCAW) \***  
**Air Carbon Arc Gouging (CAG)**

## Applications:

**Fabrication**  
**Construction**  
**Repair/ Maintenance and Installation**  
**Industrial Manufacturing**



\* External Wire Feeder required

PARAMETERS		SANMIG 400M				
MODEL		ID-4000C-U1E				
Description		MIG (STEEL/STAINLESS), DC STICK, DC LIFT TIG				
Rated output		400 A at 36 V, 25% Duty Cycle				
Welding Mode		Input Power	25% Duty Cycle	60% Duty Cycle	100% Duty Cycle	
Output Current/ Voltage	MIG	208-230/460 3Ø	400 A @ 34 V	300 A @ 29 V	200 A @ 24 V	
		230 1Ø	300 A @ 29 V	190 A @ 24 V	150 A @ 22 V	
	STICK	208-230/460 3Ø	400 A @ 36 V	300 A @ 32 V	200 A @ 28 V	
		230 1Ø	300 A @ 32 V	190 A @ 28 V	150 A @ 26 V	
	TIG	208-230/460 3Ø	400 A @ 26 V	300 A @ 22 V	200 A @ 18 V	
		230 1Ø	300 A @ 22 V	190 A @ 18 V	150 A @ 16 V	
Open Circuit Voltage		Approximately 65 V at 230/460 VAC input Approximately 18 V with low OCV circuitry enabled				
Output Range						
Volts		10 – 36	MIG			
Amperes		5 – 400	STICK TIG			
Input/ Output at Rated Output		Three-Phase		Single-phase		
		Voltage	Current	Voltage	Current	
Rated Input Voltage/ Current		208	67	208	97	
		230	61	230	87	
		460	31	N/A	N/A	
Output Amperes		400		300		
Output Volts		36		32		
KVA		24		20		
KW		18		12		
Input						
Input Voltage		208 – 230 / 460 VAC 3-Phase, 208 – 230 VAC 1-Phase				
Line Frequency		50 / 60 Hz				
Line Volts Compensation		+ / – 10%				
Input Cable		AWG 8/4 SOOW, approximately 10 feet long				
Dimensions (W × H × L)		8.26 in (210 mm) × 17.12 in (435 mm) × 17.71 in (450 mm)				
Weight (with cable)		56 lb. (25 kg)				

# SanRex

SanRex is an innovative, dynamic power leader, with a proven record in deploying new generation resources and strategic planning.

**SANREX CORPORATION** is the U.S. subsidiary of **SANSHA ELECTRIC MFG. CO., LTD.** located in Japan.

Founded in 1933 **SANSHA ELECTRIC MFG. CO., LTD.** began building automatic transformers for movie projectors. Our highly engineered products can be found around the world.

Today, we are a well-recognized company in Europe and Asia. Based in Osaka, Japan we have about 1,000 employees with branch offices in 6 countries.

**SANREX CORPORATION** is a diversified, worldwide provider of well-engineered equipment and exceptional services in the welding market.

**SANREX CORPORATION** continues to expand and improve its range of products to provide more comprehensive, high-efficiency, wide input voltage range, reliable equipment for the welding industry.

Collectively, with our customers we move forward, expanding the frontier of welding technology, consistently improving performance, functionality and raising the bar for newly innovated technology.



## Caution

Read and understand the entire Operating Manual and your employer's safety practices before installing, or using the equipment. Do not install the equipment in an area where water, high humid, steam, dust or oil are located. It may cause damage to the equipment or result in a fire or electrical shock.

- Please note that the parts such as fan or fuse needed to be replaced are chargeable when replacing. Also, keep accessory parts in a safe place.
- Please contact us if the equipment is used for any other applications not specified in this brochure.
- Specifications are subject to change without any notice.

## SANREX CORPORATION

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• Power Semiconductors • Clean & Save energy (Solar power, Wind power, Co-generation) • Environment (Plasma ash melting, Ozone generation, Cleaning Unit) • IT-related systems (Communication power supply, UPS)  
• Industrial systems (Surface treatment, Electric Power Controller, Welding machine, Lighting power supply)