IPS-200

CRITICAL SYSTEMS, INC.

IPS-200 Power Supply:
Fully Developed for Process Installation

Power Source: IPS-200

The IPS-200 is a direct current (DC) power supply developed for welding a variety of metals and alloys that lend themselves well to the Gas Tungsten Arc Welding (TIG) process.

Key improvements to the IPS-200 include advanced inverter technology, which produces the highest level of amperage output in its class. An industrial grade PLC allows for repeatable program performance and an unmatched arc control, producing a signal that is head and shoulders above the competition. The IPS-200 offers unique stability during times when potential power issues, often called “dirty power,” are observed, significantly lessening potential faults. A large variety of weldheads can be used with this system, all of which perform at their peak.

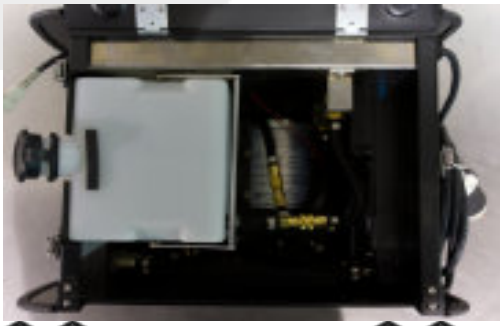
The IPS-200 is the lightest weight power source available in the marketplace, allowing easy transport during field installation. It also hosts an all new filtration system to the inlet cooling fans, keeping this “state of the art” power source cleanroom compatible and running smoothly for years to come.

Cooling Unit: S-COOL

The S-COOL is our latest and largest 3-liter cooling unit with a host of new features. It includes a detachable reservoir with industrial “quick snaps” that make it both secure and simple to remove.

Features:

- Large reservoir (3 Liter w/ large fill spout for filling while in operation)
- 110V or 220V, single phase, or standalone power (Independent from IPS-200)
- Flow indicator
- Visual control of coolant level
- DC24V pump, max flow 70 PSI (flow at maximum pressure is 0.8 gallons per minute)
- Locks to power supply using convenient latch system
- Full weight: 30 lbs (empty weight: 22 lbs)



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PLC: Why use Industrial Grade Programmable Logic Controllers?

Safety. PLCs have integrated safety functions called redundancies that accomplish four objectives:

1. Maximum uptime: Microprocessors would otherwise be unable to handle the extreme conditions of industrial use.
2. New equipment designed for PLCs are still compatible with systems that were manufactured years ago. This makes legacy and future support a snap.
3. PLCs require much less maintenance than microprocessors. Microprocessors are subject to disturbances in the unit via electromagnetic induction, electrostatic coupling, or conduction due to radio wave interference. PLCs, on the other hand, are more sturdy under these conditions. They are also easier to maintain, and more versatile when future upgrades are required.
4. PLCs are regulated and protected to avoid power fluctuations that can destroy or cause performance issues in unprotected microprocessors.

PLCs are virtually immune to noise and can easily handle the high temperatures and power fluctuations in industrial settings. PLCs are rugged computers designed for industrial environments and are king of industrial automation and control systems.

Software: In today's world, software makes the world go round.

IPS-200 software features:

1. CSI Asset Library: featuring world class weld programs.
   a. As a lease customer or owner of the IPS-200, you will have full access to our all new, online "master library" developed by CSI and our partners. This library allows you to select from an expansive weld program index which will get you a step away from the program needed for your specific application. These include advanced alloys, specialty welds, odd configurations, and even mixed gas weld options.
   b. Full team access both online and offline. As a customer you will have access to online support, including training videos, the asset library and cut sheets, manuals and innovation alerts. CSI also offers "call-in" support to help trouble shoot an application or weld program you are having trouble with. No matter your requirement, our team is ready to support.
2. Program Development: Simple weld programming and intuitive functions to create programs in minutes.
3. Safety features such as alarms, notifications, and faults. (See Owner's Manual for more information)
4. Easy buttons on the RP-1 allow you to switch between the following:
   a. *Your* personal library of programs
   b. Customized programs
   c. Our full library of "tack welds"

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Portability

The IPS-200's advanced design provides the lightest weight system in the marketplace, weighing 20-35% less than competitors. This, combined with our new Orbital Job Cart (JCAR – See Owner's Manual), incorporates all necessary tools and equipment to get your system in position to perform installation work and allows your team to perform their work with ease and efficiency. JCAR allows you to transport the weld gas bottle, regulator, heads and cables, power supply, cooling unit, and any accessories you need throughout a construction area smoothly. Performing your work in the field has never been easier.

Remote Pendant: RP-1

The new RP-1, our all new, IPS-200 Pendant, is the first of its kind. It offers full software functionality on an easy to use touchscreen.

Stay tuned, the "Intelligent Power Supply" IPS-200 is going to the next level in 2024 with data collection and recording systems only available with our system.

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IPS-200 Specifications

Input power	Single phase + earth
Supply voltage	110 to 230V +/-15%
Isolation class	A
Protection class	IP21
Maximum current on main	23 A under 230V and 32 A under 110V
Welding current (steps of 1A)	Constant or pulsed: 3 to 200 A (200V / 230V) 3 to 140 A (100 V / 115 V)
Open circuit voltage	76V
Welding current precision	±1% when I ≤ 10A and ±0.5% when I > 10A
Duty cycle	200 A / 25 % at 230V 140 A / 60 % at 230V 115 A / 100% at 230V 140 A / 35% at 110V 115 A / 60% at 110V 100 A / 100% at 110V
Motion controls	Torch rotation: constant
Shielding gas control	Head and line purge with adjustment control. Suitable for Ar, N2, He, and H2 (5% max)
Power source cooling	Filtered forced ventilation
Welding torch cooling	Stand alone closed loop cooling system with flow sensor
Display/recording (non-volatile) of real values during welding	• Arc voltage (high and low pulse) • Weld current (high and low pulse) • Electrode position in degrees • Rotation speed in Inches/Second
Weld program storage/transfer	USB memory stick
Real-time data acquisition	Internal
Dimension L x W x H	18” x 9.75” x 19”
Weight	44 lbs
Standards	IEC 60974-1, IEC 60974-3, IEC 60974-10