

Highly reliable inverter type welding power supply NRW-IN400PA

DC inverter welding power supply ideal for mounting on automated machines

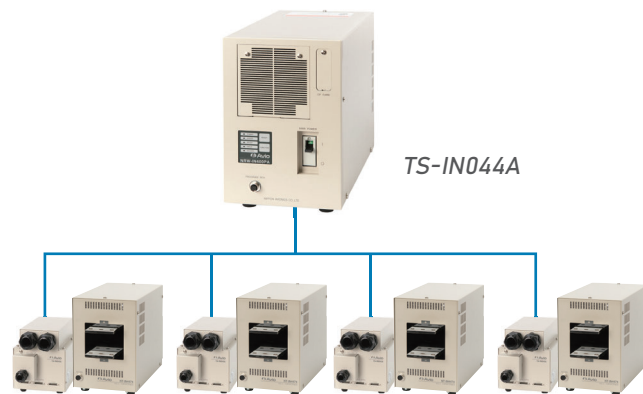
DC inverter welding power supply suitable for mounting on automated machines. It has selections of 6 types of control modes and 3 types of frequencies by which high quality welding is performed by the optimum mode depending on objects to be welded. In addition, it has a built-in welding monitor function, and can output monitor values and judgment results to external devices via Ethernet communication. It is effective for strengthening welding quality control.



- **3 types of frequencies (2kHz, 4kHz, 5kHz) can be selected.**
The optimum frequency for the work can be selected for each program number.
- **Multi control mode**
Constant current, constant voltage, constant power, primary peak value, primary current average, fixed pulse width.
- **Arbitrary waveform (freestyle) function**
"UP", "WELD", "DOWN" and "COOL" can be set arbitrarily in a maximum of 127 steps.
It supports various welding waveforms such as multi-stage slope welding and arbitrary waveform pulsation.
- **Welding condition compensation function (target value compensation function)**
It is fine-tuning of the welding waveform target value with the IO signal. Adjustment is made in a short time (10 ms or less) because the welding condition (Program_No.) is not changed.
- **Built-in welding monitor function**
The average and peak values of current, voltage, power, and resistance, and the limit monitor judgment result are displayed.
- **Variation of power stop signal within 1ms**
High-speed processing from the welding stop command reduces the error in the displacement of the work
- **Reinforced dustproof structure**
Designed to be hard to break under the harsh environments (dust, oil mist)
- **Others**
Multi-transformer, Ethernet communication

Multi-transformer system

Up to 4 transformers can be connected to one welding power supply, and multiple welding processes can be handled by one unit. Equipment installation costs can be reduced. Also, by switching the welding conditions with an external signal, it is possible to operate under different welding conditions for each transformer.



Item	TS-IN044A
Dimensions (mm)	W148 × D261 × H180
Weight	≈ 4.3kg

Program box NA-PB100

Program box allows remote operation

It is possible to operate multiple inverter power supplies with one unit.

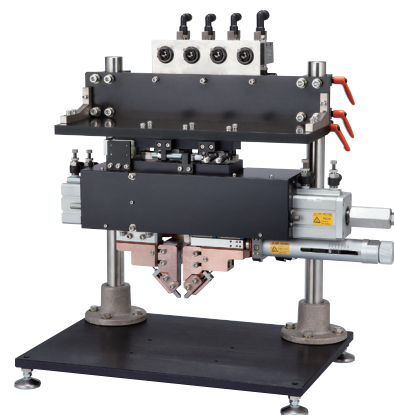
When installed in an automated machine, it gives flexible layout of welding power supply.



Item	NRW-IN400PA
Control Frequency	Selectable from 2kHz, 4kHz, 5kHz (Select for each PRG No)
Control Mode	Primary current peak value control, Primary current average value control, Secondary current effective value control, Secondary voltage effective value control, Secondary power effective value control, Fixed pulse width control
Range of Output Setting	400A (Duty Cycle 5%), 200A (Duty Cycle 20%)
Range of Timer Setting (ms)	0.0-3000.0 (Total time of UP TIME, WELD TIME, DOWN TIME, COOL TIME)
Number of Conditions	255
User Interface (Setting Tool)	Program box
Monitoring Function	Average value/peak value monitor, pulse width monitor of current, voltage, power, resistance respectively
Multi-stage Welding Function	3-phase mode (slope, weld, cool)/ free style mode (Max. 127 step)
Cooling Method	Air
Interface	Ethernet
Power Source	220V specification: 3φ AC200-240V±10% 50/60Hz, 400V specification: 3φ AC380-480V±10% 50/60Hz
Dimensions (mm)	W200 × D501 × H298 (Excluding protrusions)
Weight	≈ 19kg
Welding transformer	NT-IN8444B, NT-IN4474A

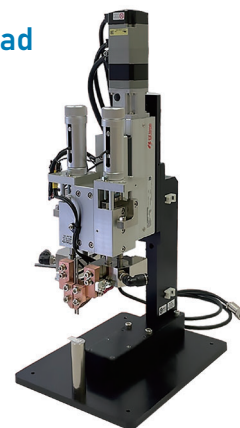
Horizontal pressure type head NA-184

Stable welding is realized by a high-rigidity head in which the left and right electrodes are driven independently.



Battery tab welding head (custom-made)

Variety of weld heads can be created that fit to various battery tabs.



Major transformers to be connected

Item	NT-IN4474A		NT-IN8444B	
	220V specification	400V specification	220V specification	400V specification
Maximum Welding Current	4000A (Duty cycle 5%)		8000A (Duty cycle 5%)	
Rated Capacity (Duty Cycle 50%)	11 kVA	10 kVA	36 kVA	33 kVA
Primary Input Voltage	300V	600V	300V	600V
Secondary Open-circuit Voltage	8.4V	7.6V	14.1V	12.9V
Transformer Turns Ratio	37:1	74:1	22:1	44:1
Input Frequency	2kHz/4kHz/5kHz		2kHz/4kHz/5kHz	
Cooling Method	Air		Air	
Dimensions (mm)	W150 × D337 × H222 (Excluding protrusions)		W200 × D370 × H214 (Excluding protrusions)	
Weight	≈ 14kg		≈ 23.4kg	