

SPARTUS®



INDUSTRIAL TIG DC WELDER WITH PULSE



ProTIG
321PW DC

■ The **SPARTUS® ProTIG 321PW DC** is a modern inverter welder based on IGBT technology and pulse width modulation (PWM). This high-class power source, deli-

vering up to 320A and powered by a three-phase 400V supply, has been designed for intensive production and industrial applications.

TIG WELDING

The machine supports the TIG DC process, providing precise control over welding. The operator can adjust key parameters such as:

- **upslope and downslope time,**
- **start and end current,**
- **pre-gas and post-gas,**
- **2T/4T modes and SPOT mode.**

The **TIG Pulse function** allows adjustment of pulse current, base current, frequency (0.5–999Hz), and pulse width (5–95%). This makes the welder an excellent choice for welding very thin sheets, ensuring high quality and aesthetic welds.

MMA WELDING

The SPARTUS® ProTIG 321PW DC also enables covered electrode welding in MMA DC mode. The operator has access to supportive functions: Arc Force (0–10) and Hot Start (0–10), which improve arc stability and facilitate electrode ignition.

MEMORY CHANNELS – QUICK RECALL OF SETTINGS

The SPARTUS® ProTIG 321PW DC is equipped with an advanced memory system that allows saving up to 10 different welding configurations. This function enables welders to quickly and easily switch between various settings, perfectly adapted to the specifics of working with different materials and in diverse environments. As a result, users can significantly speed up their workflow, eliminating the need for constant manual parameter adjustments. The ability to store favorite settings makes the SPARTUS® ProTIG 321PW DC not only efficient but also highly intuitive to

MOBILE SET ON A WELDING CART

The SPARTUS® ProTIG 321PW DC is supplied as a set with an integrated cooler mounted on a practical welding cart. This convenient and functional configuration not only significantly improves the mobility of the entire set but also increases cooling efficiency, which is crucial during longer welding sessions. With improved heat dissipation, welders can work longer without the risk of equipment overheating, resulting in higher performance and extended service life of the machine. Additionally, the mobility of the set allows for easy movement between different workstations, which is especially valuable in dynamic industrial environments.



operate, making it an ideal tool for professionals seeking efficiency and precision in welding.



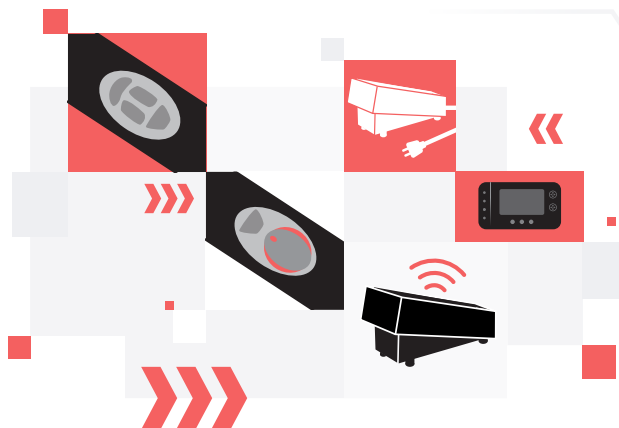
» PROTIG 321PW DC

■ COOLING

The SPARTUS® ProTIG 321PW DC offers a flexible cooling option, allowing operation with either gas cooling or the integrated cooler. Switching the mode on the control panel is all it takes to adjust the cooling system to current needs and working conditions.



» Wersja urządzenia bez chłodnicy
ProTIG 321P DC



■ CONTROL

Operation is carried out via a modern function panel with an LCD display. All parameters are smoothly and steplessly adjustable, allowing full control over the process. Additionally, the machine is compatible with both wired and wireless remote controls, including a foot pedal, which enhances user comfort.

THE UNIT SUPPORTS VARIOUS FORMS OF REMOTE CONTROL:

Control options	UP&DOWN torch control	Torch control – potentiometer	Wired foot control	Wireless foot control	Wireless remote control
PROTIG 321PW DC	✓	✓	✓ SP-FC	✓ SP-FC2	✓ SP-PILOT3

■ EQUIPMENT

The SPARTUS® ProTIG 321PW DC both as a standalone power source with a cooler on a welding cart and in various configurations tailored to the user's needs.

The suggested package includes:

- ProTIG 321P DC
- cooler
- MaxCoolant- cooling liquid
- 4 wheel drive set
- TIG torch SPARTUS SPP 18 4B X 4m
- TIG toolbox (consumable kit)
- 3 m electrode holder
- 3 m work clamp
- gas hose
- user's manual

Thanks to a flexible and innovative customer-oriented approach, SPARTUS® Pro machines can also be configured with different torches and expanded with additional accessories, creating a set perfectly suited to the specifics of the job.



The **SPARTUS® ProtIG 321PW DC** is a professional TIG DC welder with pulse, designed for demanding industrial applications. The combination of advanced functions, robust construction, and intuitive control makes this machine meet the expectations of even the most demanding welders.



PROTIG 321PW DC

TECHNICAL PARAMETER

Input	~3× 400V ± 10% 50 / 60 Hz	MMA welding current	10 – 320A
TIG welding current	10 – 320A	Arc Force	yes
TIG duty cycle	60%	Hot Start	yes
Gas pre flow	0.1 – 2s	No-load voltage	72.6V
Gas post flow	0 – 10s	Current consumption	DC: TIG 18A / MMA 23.8A
Up slope	0 – 10s	Power factor (cosφ)	0.7
Down slope	0 – 10s	Efficiency η	85%
TIG Pulse	yes	Insulation class	H
Pulse Amps	10 – 320A	Protection class	IP21S
Pulse Width	5 – 95%	Weight	74.5kg
Pulse frequency	0,5 – 999Hz	Dimensions	1150 x 600 x 1200mm
2T/4T control	yes	Control plug	9SPA - SPARTUS®
Arc ignition	LIFT / HF		

