

# RAZOR DIGITAL 315 AC/DC TIG/MMA - Digital Inverter Welder

**Welds:** Aluminium, Magnesium, Zinc Alloys, Steels, Stainless,  
Cast Iron, Bronze, Copper



- Latest IGBT Inverter Technology
- AC/DC HF TIG/MMA Function
- 2T/4T 2S/4S Trigger Select
- AC Square Wave • AC Balance Control
- Pulse Control
- Pulse Width Control • Base CurrentControl
- Up Slope / Down Slope Control
- Pre Gas / Post Gas Control
- Arc Ignition Current Control
- Arc Ignition Time Set Control
- Arc Force Select
- Remote Amperage Control
- Job Memory / Recall

## Technical Data

Power Supply / Phases (V-Ph)	415V - 3 ±15%
Rated input capacity (KVA)	9
Rated Input Power (KW)	8.4
ieff (Amps)	13
imax (Amps)	19
Rated Output (A/V)	315/22.6 TIG 250/30 MMA
No-Load Voltage (V)	45
Duty Cycle @ 40°C as per AS/NZ60974-1	20%@315Amps TIG 60%@230Amps MMA
Power Factor	0.93
Protection Class	IP21S
Insulation Class	B
Cooling Mode	Forced air cooling

### Parameters in MMA (DC, AC)

Welding current range (A)	DC: 10~250 / AC 20~250
Arc ignition range (A)	DC: 10~300 / AC 20~300
Arc force current range (A)	0~100
AC frequency (Hz)	50

### Parameters in TIG (DC, DC pulsed, AC, AC pulsed)

Start current range (A)	DC: 10~320 / AC: 20~250
Peak current range (A)	DC: 10~320 / AC: 20~320
Base current range (A)	DC: 10~320 / AC: 30~320
Finish current range	DC: 10~320 / AC: 20~250
DC pulse frequency range (Hz)	0.5~200
DC pulse duty (%)	10~90
AC frequency range (Hz)	20~70
AC balance	10~60
AC pulse frequency range (Hz)	0.5~5.0
AC pulse duty (%)	10~90
Upslope time (s)	0~60
Downslope time (s)	0~60
Pre-flow time (s)	0~15.0
Post-flow time (s)	2.0~20.0
Arc ignition mode	Contact arc ignition, HF arc ignition
Size (mm)	590x375x380
Weight (kg)	33Kg
Warranty	3 years on power source
Certification Approval	AS/NZ60974-1



UTJRFC-3  
Remote Foot Control Option



UTJRTrolley  
Trolley Option

## Overview

The RAZOR315AC/DC is a Digital Controlled square wave AC/DC TIG inverter welder with full TIG functionality that offers simple step by step digital setting of functions and parameters providing you with complete professional control. HF arc ignition provides pre gas with instant arc ignition leaving no tungsten inclusion or contamination of the tungsten electrode. Digital set of Pre Gas Time, Start Current, Up Slope and Down Slope Time, Finish Current Level and Post Gas Time with the choice of 2T or 4T trigger function allows controlling the start and finish of the weld process at a professional level. Digital Pulse Frequency Control gives full parameter setting of Peak Current, Base Current, Pulse Frequency and Pulse Width, allowing control of heat input into the work for penetration control and minimising distortion. AC Square Wave with Balance Control gives maximum control of the electron flow at the tungsten allowing to set the AC TIG arc for maximised cleaning of the oxide layer on aluminium to adjustment for a deeper penetrating weld. Combined functions of the RAZOR315AC/DC ensures comprehensive control of welding parameters when welding AC and DC weldable materials to produce high quality Tig welds. Our unique Torch Remote Control Interface provides remote amperage control from the torch in both static and live welding modes. The DC MMA welding function delivers a smooth and stable arc allowing easy welding with electrodes obtaining high quality welds including cast Iron, stainless and low hydrogen. The added bonus of Arc Ignition and Arc Force control allows you to set the ideal arc condition no matter what electrode you choose. The RAZOR315AC/DC has raised the benchmark for 415V three phase AC/DC welders making it ideal for multiple applications; aluminium & stainless steel fabrication and repair and maintenance applications. Built to our specification and manufactured in compliance to AS/NZ60974-1

## MACHINE PACKAGE: KUMJRRW315AC/DC

Standard option includes: RAZOR315AC/DC Machine, SR26 TIG Torch x 4m, Earth Lead & Arc Lead 25mm x 4m, UNI-FLAME Argon Regulator, 2M Gas Hose with fittings

