



→ Artsen2 CM500C  
Full-digital Carrier-wave CO<sub>2</sub>/MAG  
Welding Machine

## How to Improve Reliability of Control Cable?

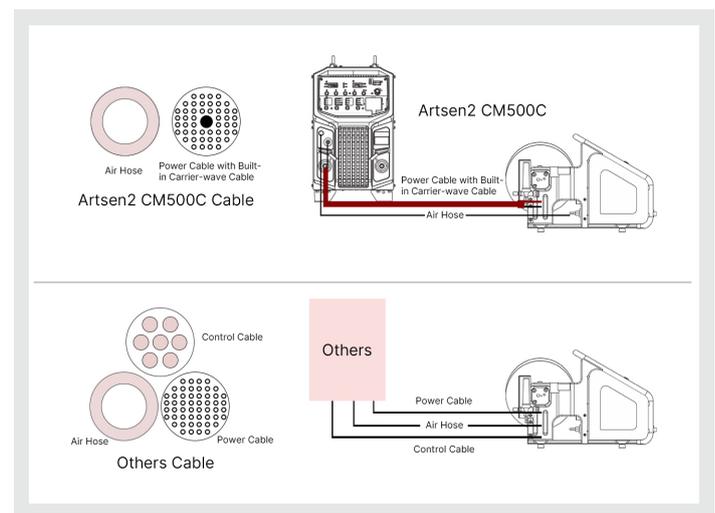
— Replace with Carrier-wave Technology !

# Artsen2 CM500C Full-Digital Carrier-wave CO<sub>2</sub>/MAG Welding Machine

Designed for super-long distance welding applications such as shipbuilding, offshore engineering, and steel structures, etc.



## Pioneer in adapting Two-way Digital High-speed Carrier-wave



### Product Features

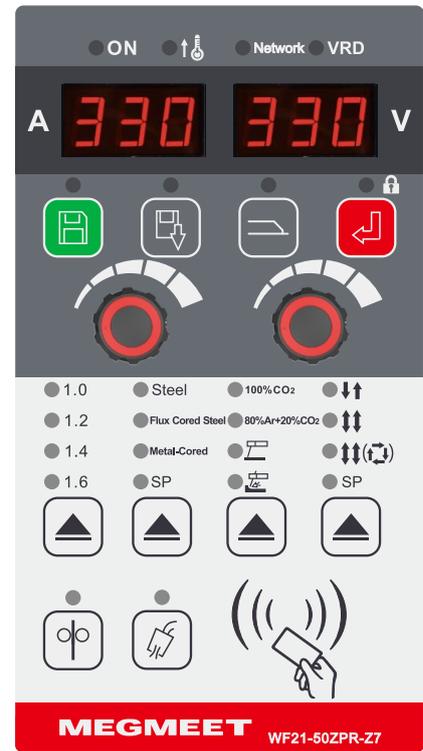
As statistics, more than 70% of welding machine shutdown is caused by the weak control cable being broken on site. The unique two-way digital PSK high-speed carrier-wave technology of Megmeet saves control cable and greatly improves overall reliability.

- Carrier-wave technology reduces the weight and volume of interconnection cable by 30%;
- Adjustable carrier communication frequency and strong anti-interference ability can achieve 100 meters of remote stable welding;
- Multiple welding processes are combined into one machine, supporting CO<sub>2</sub>/MAG/MMA/carbon arc gouging and other welding processes;
- Most functions of the main machine front panel is available on wire feeder, supports remote adjustment for common functions;
- With current and voltage limiting function, upper/lower limits of welding current and voltage can be set to prevent operating outside WPS parameters;
- Multiple protection functions including input over/under voltage, input phase loss, primary/secondary overheating, output over-current, carrier cable short circuit, etc.;
- Up to 99 sets of welding parameter JOB channels, one-key call, easy operation;
- Lightning protection level reaches Class D, wide input voltage range be more suitable for harsh power grids and can upgrade to work with diesel engines;
- 100%@500A duty cycle, using patented technology cooling solution, IGBT thermal conductivity efficiency increased by 50%;
- RFID card binding function and reserved IOT interface , be able to work with SMARC IOT welding management system;
- USB upgrade function can help users to easily obtain the latest welding technology of Megmeet;
- Compatible with the first generation Artsen CM500C, main machine and wire feeder are interchangeable;
- Meet China national first-level energy efficiency standard and greatly reduce electricity costs.

Available with many welding processes including DC flexible transition, pulse mixed

Remote control is more convenient for welders.

- Supports remote adjustment on wire feeder and flexible switching: CO<sub>2</sub>, MAG, MMA, carbon arc gouging.
- Anti-electric shock and VRD function ensures personal safety.





## ↔ Two-way Digital PSK High-speed Carrier-wave

- Communication Technology
- PSK (Phase-Shift Keying) modulation and demodulation scheme provides stronger anti-interference ability.
- Carrier frequency can be adjusted within 65K-100KHz, with a wider range of adaptability;
- 100 meters of long-reach stable welding.



Shipbuilding Industry

## ↻ CO<sub>2</sub>/MAG Function

- 1.0, 1.2, 1.4, 1.6mm solid wire;
- MAG flux-cored carbon steel wire, metal-cored wire and other processes.



Offshore Industry

### MMA Function

- One machine with multiple process, be able to quickly repair weld gaps and rework welds;
- Suitable for long cable operations, with arc starting current and thrust current adjustment functions.



### Carbon Arc Gouging Function

- Quickly clean welding roots and rework welds;
- High duty-cycle, more adaptive for long-time and high-current cleaning of medium and thick plate welding;



### RFID Card Swiping

- Easy binding welders and welding machines;
- Work with Megmeet SMARC IoT welding management system to realize more intelligent functions, such as: parameter issuing, welding time statistics, welding parameter traceability, etc.



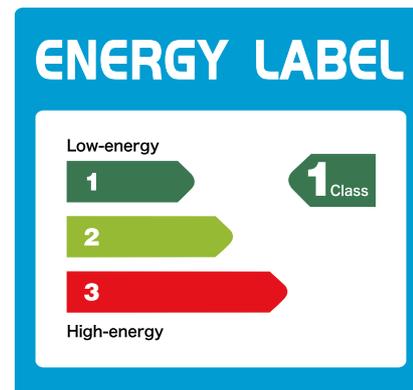
### USB Interface

- Ensures customers to conveniently obtain Megmeet's latest welding technology and function customization. Software can be sent by email and downloaded to a USB flash drive, and upgraded into the machine as instruction.



### 1级 First-class Energy Efficiency

- The entire series of machines reach first-class energy efficiency and save ~3 degrees/day of electricity compared with other brands of inverter welding machines (data is based on 300A welding).





## Technical Specification

Parameters	Artsen2 CM500C
Control Mode	Fully Digital-control
Carrier-wave Communication Method	Two-way Digital High-speed Carrier-wave Communication Technology
Rated Input Voltage	AC 3PH 380V -15% ~ 400 V +15% (3PH 323V ~ 3PH 460V)
Input Frequency	50 ~ 60 Hz
Rated Input Power	22.8KVA/21.7KW
Power Factor	0.95
Efficiency	89%
Rated OCV	70V
Rated Output Current	50 ~ 500A
Rated Output Voltage	12 ~ 50V
Duty Cycle (40°C / 10 min)	100%@500A@40°C
Certification	Class A
Protection Against Lightening	Class D (6000V/3000A)
Welding Operation Mode	2T / 4T / Special 4T
Inductance Scope (Soft / Strong Arc)	-9 ~ +9
Parameter Channel	99 (standard)
Cooling Mode	Intelligent air cooling
Wire-feeder Digital Display	Included, welding parameter can be adjusted remotely
Wire-feeding Speed	1.4 ~ 28m/min
Insulation Grade	H (Transformer F)
Ingress Protection	IP23
Working Temperature	Industrial heavy duty, -39°C ~ +50°C
Dimension (L / W / H)	684X320X580mm
Gross Weight	38kg
Carrier wire feeder Weight	9.9kg
Diesel generator kit	Optional

Welding Process	Welding Material	Welding Wire Diameter (mm)	Shield-gas
DC CO <sub>2</sub> /MAG	Solid carbon steel	1.0/1.2/1.4/1.6/SP	100%CO <sub>2</sub>
	Flux-cored carbon steel	1.0/1.2/1.4/1.6/SP	
	Metal-cored carbon steel	1.0/1.2/1.4/SP	80%Ar+20%CO <sub>2</sub>
DC MMA	Electrodes	Yes	-
Carbon arc gouging	Carbon rods	Yes	-