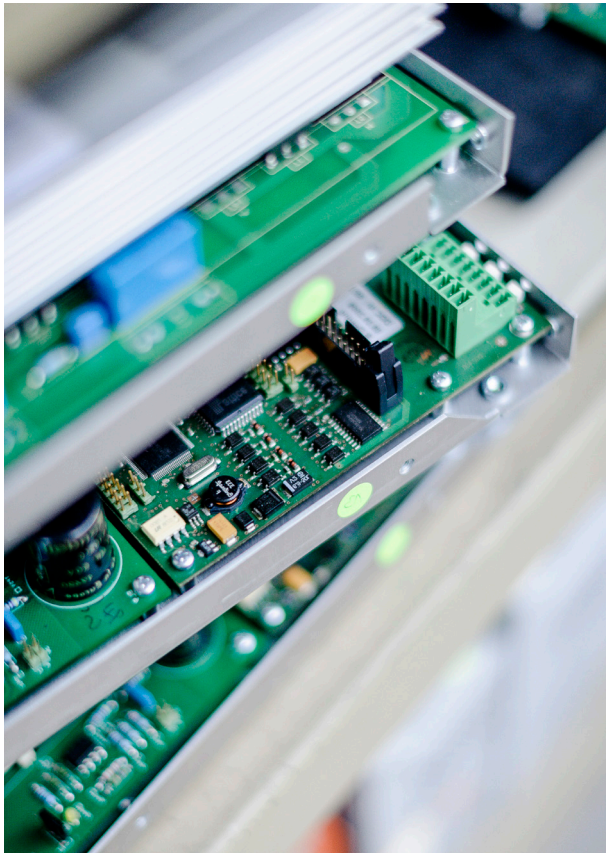# agm²

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AROUND YOU EVERY DAY

RINCO ultrasonic generators

ULTRASONIC GENERATORS –
EVERYTHING UNDER CONTROL, ALWAYS

With RINCO ultrasonic generators, you always have everything under control – from managing your manual units or the ultrasonic welding machine, through to triggering the ultrasound in an automation line or special machine. The generators are intuitive to operate and easy to install. They have a space-saving design, feature all the standard interfaces and can be used in almost all areas of application.

RINCO manufactures ultrasonic generators in 7 product series:

XDG2 SERIES
ADG SERIES
AGM PRO SERIES
AGM2 SERIES
SDG SERIES and
RDG SERIES

Our **ECOLINE generator** is the perfect solution for carrying out simple applications and textile welding.

Would you like a tailor-made solution for your specific requirements? Contact us and we will be happy to advise you.

COME AND DISCOVER THE OUTSTANDING QUALITY OF RINCO PRODUCTS FOR YOURSELF

We are proud that our efforts to achieve perfection have been recognised by official bodies. The ISO certifications awarded to us prove that Swiss values such as reliability and precision are important roots from which our corporate culture has grown. We will always offer consistently high quality and the very best service.

CERTIFIED ISO 9001 ZERTIFIZIERT **CERTIFIED ISO 13485 ZERTIFIZIERT** **CERTIFIED ISO 14001 ZERTIFIZIERT**

CE
All RINCO machines are **CE-compliant** and therefore meet high European standards.

RELIABILITY
RINCO generators operate very **reliably**, are practically maintenance-free and have a **long service life**.
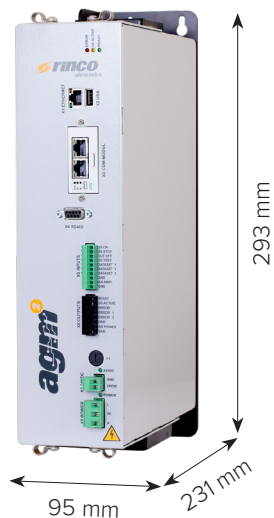
AFTER-SALES SERVICE
We help our customers out with **technical support** even after they have made a purchase.

EFFICIENT RINCO AFTER SALES SERVICE

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AGM2 SERIES – Integration with the very best communication

AGM2

Dimensions: 95 mm × 231 mm × 293 mm

Ultrasonic generators from the AGM2 series have been specially developed for use in **automated lines, special-purpose machines** and **automated welding systems.** They reliably perform ultrasonic welding tasks on thermoplastics and ultrasonic cutting tasks on technical textiles and food. Thanks to their compact design, they can be integrated into electrical cabinets to save space. An optimized cooling system ensures smooth operation.

Fieldbus interfaces and the **ProConnect web application** make the ultrasonic generators an ideal solution for implementing your **Industry 4.0** concept.

KHZ	Operating frequency:	20 kHz, 30 kHz, 35 kHz, 40 kHz, 70 kHz
	Output power:	3000 W, 2000 W, 1500 W, 1000 W, 900 W, 800 W, 750 W, 500 W, 400 W, 100 W
	Amplitude:	15–100%, can be altered in increments of 1%
KG	Weight:	3 kg
	Voltage:	230 VAC / 24 VDC
	Control:	Via the system's own PLC

COMPATIBLE DEVICES

Compatible with:	Several cutters and special actuators

SV35-40   SPC35   SFC20

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AGM2 SERIES – At a glance

STATUS LED
LED show if the
- generator is ready
- ultrasound is on
- an error has occured

PROCONNECT
Have access to the **Web application ProConnect** via Ethernet port to set parameter, create parameter datasets, for real time monitoring, and to have an eye on the current parameters and settings. Also **remote access** is possible.

pro ConnecT

FURTHER COMMUNICATION INTERFACES
- RS485
- Digital and analogue inputs and outputs with unique connectors and status LED

EASY ACCESS TO FUSE

OPTIMISED COOLING MANAGEMENT
A ventilator helps to keep a cool working temperature. The filter mats can be replaced.

TWO INSTALLATION OPTIONS
With the same holder the AGM2 can be mounted in two positions - from the side or back.

DATA TRANSFER
Via USB port, a **backup** or a **restore** of the parameter datasets can be done. Via USB port you can also copy the parameter datasets from one AGM2 to another.
You can also transfer the current welding data - continuously or at the end of every welding. Each dataset is **time-stamped**.
Also software updates can be done easily via USB port.

COMMUNICATION MODULES
Exchangeable modules to easily integrate the generator into the system with our certified* fieldbus interfaces:
- PROFINET
- PROFIBUS
- DeviceNet*
- EtherNet/IP*
- EtherCAT*
- CANopen*

PROFINET®   PROFIBUS®

DeviceNet   EtherNet/IP

EtherCAT   CANopen

(device labels)
- X1 ETHERNET
- X2 USB
- X3 COM-MODUL
- X4 RS485
- X5 INPUTS: US ON, US STOP, CUT OFF, US TEST, DATASET 1, DATASET 2, DATASET 3, GND, AN AMPL, GND
- X6 OUTPUTS: READY, US ACTIVE, ERROR 1, ERROR 2, GND, AN POWER, GND
- F1
- X7 +-24VDC: 24VDC, GND, 24VDC
- X8 POWER: POWER, L, PE, N

FIELDS OF APPLICATION

- AUTOMOTIVE
- HIGH-TECH
- PACKAGING
- FOOD
- NON-WOVEN & TEXTILE
- MEDICAL
- HOUSEHOLD
- COSMETICS

WELDING
CUTTING
PUNCHING
RIVETING
EMBOSSING
FLANGING
INSERTING
SEALING

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AGM2 SERIES – Integration with the very best communication

CERTIFICATIONS & APPROVALS

For all AGM Pro-series ultrasonic generators:
- NRTL certification, cTUVus (for USA and Canada) – equal to UL certification
- SEMI S2 certificate
- CB test certificate
- CE marking

QUALITY CONTROL

The ultrasonic generators from the AGM2 series can be used to set various limits that issue a warning or error message if they are breached.

MAXIMUM REPEATABILITY
Up to **8 parameter data sets** can be stored in the database.

SOFTSTART AND SOFTSTOP FUNCTION
These functions gently **augment and attenuate the oscillations** of complex horns.

6 WELDING MODES TO CHOOSE FROM Thanks to the welding modes, you can find the **right setting for every application**, guaranteeing perfect welding. The following welding modes can be selected on the AGM2 series:

⏱	Welding time
W/S	Welding energy
⏱ W/S	Welding time AND/OR welding energy
	Contact breaker
	Continuous

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PROCONNECT – User-friendly input options

Thanks to our custom-developed **ProConnect web application**, you can easily configure parameters and edit data sets. ProConnect also displays the current values of the welding process as a graph, allowing you to monitor the current welding operation on your PC or mobile device **in real time.**
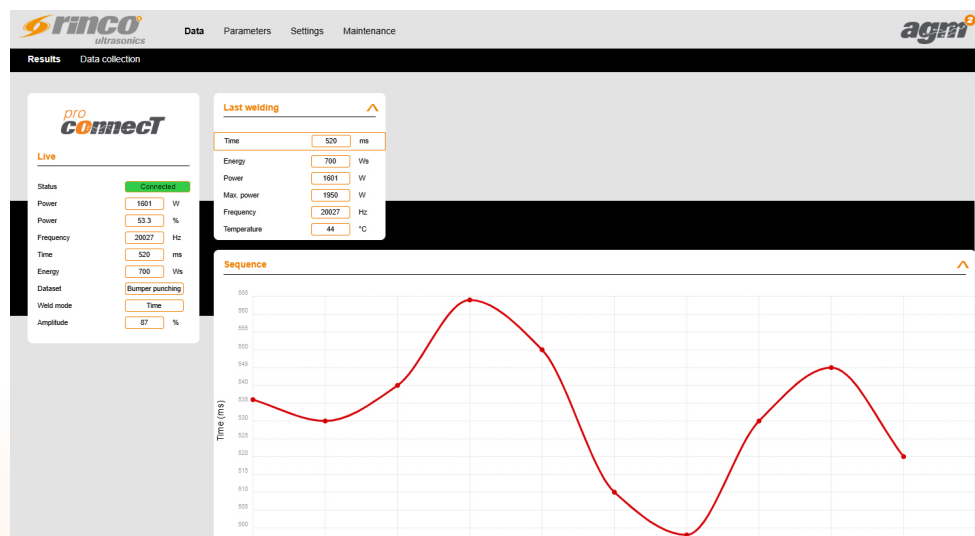
You can find other features as well as options and accessories for the AGM2-series ultrasonic welding generators at the end of this brochure.

COMMUNICATION INTERFACES

The generator communicates with the PLC via digital I/O, RS485 or with an **interchangeable module**, enabling virtually any communication protocol, such as **Ethernet/IP, PROFINET, PROFIBUS, EtherCAT, DeviceNet, CANopen** and many others. Communication with the PLC is easy to configure and ensured for all devices.

AGM2 SERIES

COMPARISON TABLE

		XDG2/SCU2	ADG	AGM Pro	AGM2	SDG	RDG	Ecoline
	Compatible devices	Electrical Motion2 series VEM series	Standard series VST series Several actuators SFC20	Several cutters and special actuators	Several cutters and special actuators	Easy series VEA series ABW35 Several special actuators Cutters Hand units	Lots of special actuators Cutters Hand units	HC35 hand cutter HT35 hand tacker HG35 hand gun HW35 hand welding unit
KHZ	Frequency (kHz)	20, 35	20, 30, 35, 70	20, 30, 35, 40, 70	20, 30, 35, 40, 70	20, 30, 35, 40, 70	20, 30, 35, 40, 70	35
W	Output power (W)	3000, 2000, 900	3000, 2000, 1500, 1000, 900, 600, 400, 100	3000, 2000, 1500, 1000, 900, 800, 750, 500, 400, 100	3000, 2000, 1500, 1000, 900, 800, 750, 500, 400, 100	2000, 1500, 1000, 900, 800, 750, 500, 400, 100	2000, 1500, 1000, 900, 800, 750, 500, 400, 100	400
	Dimensions W x D x H (mm)	363 x 374 x 352	205 x 340 x 345	128 x 148 x 307	95 x 231 x 343.2	148 x 424 x 282	148 x 424 x 282	191 x 282 x 102
KG	Weight	16 + 9 kg	16 kg (ADG 70: 12.5 kg)	4 kg	3 kg	9.5 kg	9.5 kg	3.4 kg
2	2-year guarantee	3 years	✓	✓	✓	✓	✓	✓
	Air cooling	✓	✓	✓	✓	✓	✓	✓
	Amplitude adjustment	40–100%, 1% increments/external	40–100%, 1% increments/external	15–100%, 1% increments/external	15–100%, 1% increments/external	15–100%, 1% increments/external	40–100%, 10% increments/external	40–100%, 10% increments
	Audit trail	✓						
	Calibration	Force, amplitude	Amplitude, power	Amplitude, power	Amplitude, power	Amplitude, power	Amplitude, power	Amplitude, power
ISO6	Cleanroom, ISO class 6	✓	✓					
	Constant amplitude	✓	✓	✓	✓	✓	✓	✓
	Time mode	✓	✓	✓	✓	✓		
W/S	Energy mode	✓	✓	✓	✓	✓		
	Travel mode	✓	✓					
	Continuous mode			✓	✓	✓	✓	✓
	Contact breaker (mode)	✓	✓	✓	✓	✓		
	Multi Melt Control (mode)	✓						
GO	Trigger point	Time, travel, force, off, external signal, travel absolute & force	Time, travel, pressure, off, external signal			On, off, time, start		
	Data transmission	✓	✓	✓	✓	✓		
	Database	✓	✓	✓	✓			
	Associated software			Web application	Web application			
DGT	Digital technology	✓	✓	✓	✓	✓	✓	✓
DE EN	Multilingual	✓	✓	✓	English	✓		
W	Protection against power overload	✓	✓	✓	✓	✓	✓	✓
	Protection against overheating	✓	✓	✓	✓	✓	✓	✓
	Part counter	✓	✓			External	External	
	Plug and play						✓	✓
	Remote access	Internal, external		Internal, external	Internal, external			
	Softstart, softstop for complex horns	✓	✓	✓	✓	✓	✓	✓
	Touch display	✓		✓				
	User administration	Individual per user	✓	✓	✓	✓		

OPTIONS AND ACCESSORIES

	XDG2/SCU2	ADG	AGM Pro	AGM2	SDG	RDG	Ecoline
RS232 cable	✓	✓					
RJ45 connection cable	✓		✓	✓			
Safety relay		✓					
Contact breaker with power supply unit		✓					
Contact breaker RS housing					✓	✓	
Mains filter			✓	✓			
SDG trigger box					✓		
Tool case for 35 kHz hand units					✓	✓	✓
HC35 spanner set					✓	✓	✓
Communication modules			✓	✓			
HF switch box for hand units					✓	✓	
HF switch box					✓	✓	✓

RS232 cable
For exporting data.

RJ45 connection cable
For integrating Ethernet.

Safety relay
To convert an automated machine into a standard machine.

Contact breaker with power supply unit
Contact breaker equipment for ADG generators.

Contact breaker RS housing
Contact breaker equipment for RDG and SDG generators.

Mains filter
For special machines.

SDG trigger box
For activating the trigger.

Tool case for 35 kHz hand units
Lightweight and practical carrying case for tools.

HC35 spanner set
Lightweight and practical carrying case for the spanner set.

Communication modules
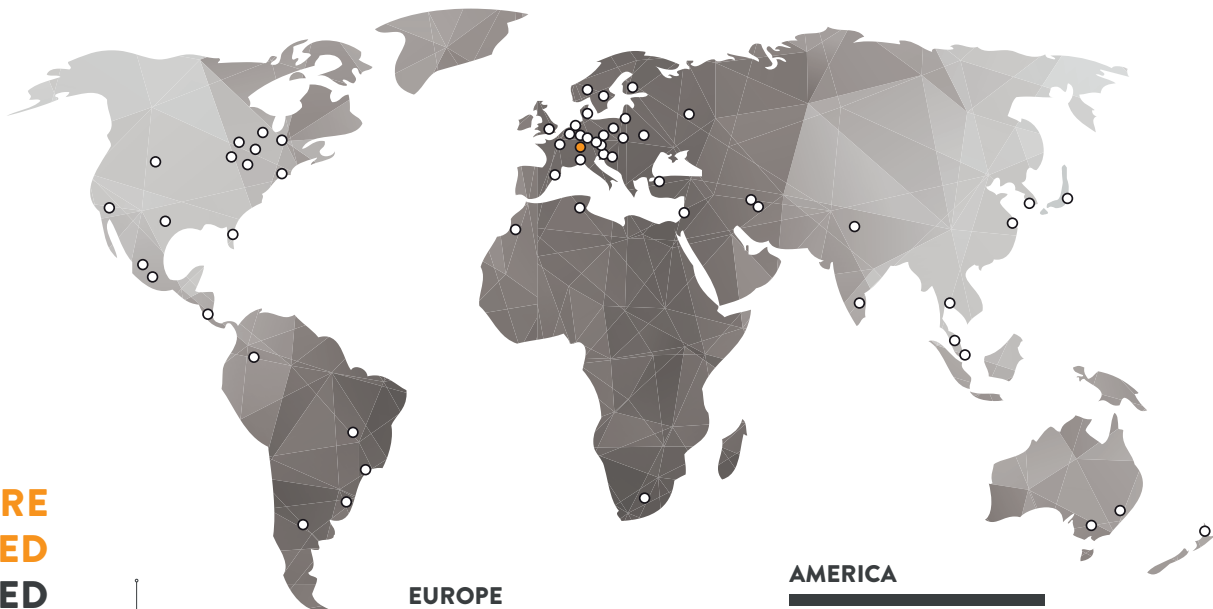6 certified interchangeable fieldbus modules:
- EtherNet/IP
- PROFIBUS
- PROFINET
- EtherCAT
- DeviceNet
- CANopen
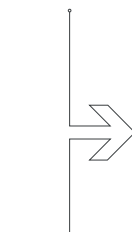
Device switch box for hand units
For easily switching from one hand unit to another hand unit with the same generator.

HF switch box
For distributing an HF signal from a single generator to multiple oscillator units.

ULTRASONIC GENERATORS

WE ARE
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