



Dear all.

I am pleased to announce the launch of the new NetWave .5 models. They are targeted for the high-end automotive market and will strengthen our position for electrical vehicle testing.



1. Short Description

The NetWave .5 are based on the .3 models with the following changes:

- Fully floating outputs with improved isolation voltage of 700 VAC / 1000 VDC (vs 460 VAC / 600 $\,$ VDC for the .3). This allows to perform voltage offset test of HV components up to 1000 VDC.
- When used in high voltage DC configuration (Opt-3 DE-EVR), HV+ or HV- can now be connected to
- The popular Opt-3 Parallel is now always included. This allows high-power single-phase operating mode and the unit is ready for future multi-unit configurations (cascade and multisource options).

The .5 models are a good fit for customers testing HV components above 560 VDC, for example the Porsche platform at 800 VDC.

It is planned to discontinue the .3 models in 2020, depending on the market feedback for the .5 models.

There are 10 new models available:

Model	Item nr.	Description
NetWave 20.5-400	1004083	Three-phase multifunctional AC/DC power source, 20 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 20/30, Opt-3 DC-EVR and Opt-3 Parallel 20/30. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 400 V.
NetWave 20.5-480	1004084	Three-phase multifunctional AC/DC power source, 20 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 20/30, Opt-3 DC-EVR and Opt-3 Parallel 20/30. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 480 V.
NetWave 30.5-400	1004085	Three-phase multifunctional AC/DC power source, 30kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isol. voltage, including arbitrary generator. Includes Opt-3 Recovery 20/30, Opt-3 DC-EVR and Opt-3 Parallel 20/30. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available.











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NetWave 30.5-480	1004086	Three-phase multifunctional AC/DC power source, 30 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 20/30, Opt-3 DC-EVR and Opt-3 Parallel 20/30. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 480 V.
NetWave 67.5-400	1004087	Three-phase multifunctional AC/DC power source, 67 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 67, Opt-3 DC-EVR and Opt-3 Parallel 67. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 400 V.
NetWave 67.5-480	1004088	Three-phase multifunctional AC/DC power source, 67 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 67, Opt-3 DC-EVR and Opt-3 Parallel 67. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 480 V.
NetWave 90.5-400	1004089	Three-phase multifunctional AC/DC power source, 90 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 90, Opt-3 DC-EVR and Opt-3 Parallel 90. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 400 V.
NetWave 90.5-480	1004090	Three-phase multifunctional AC/DC power source, 90 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 90, Opt-3 DC-EVR and Opt-3 Parallel 90. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 480 V.
NetWave 108.5-400	1004092	Three-phase multifunctional AC/DC power source, 108 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 90, Opt-3 DC-EVR and Opt-3 Parallel 108. Including









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		net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 400 V.
NetWave 108.5-480	1004093	Three-phase multifunctional AC/DC power source, 108 kVA, 3x690 VAC (p-p), +/- 560 VDC per phase, with +/- 1000 VDC (HV-DC mode), 1000 VDC isolation voltage, including arbitrary generator. Includes Opt-3 Recovery 90, Opt-3 DC-EVR and Opt-3 Parallel 90. Including net.control software with licenses net.industry (IEC 61000-4-13, -14, -17, -28, etc.) and net.automotive (LV 123, VW 80300, etc.). Optional software licenses for military and avionics standards available. Input voltage 480 V.

2. Prices & Availability

The sales prices are included in the 2019–09 V1.0 price list (distributed separately).

.5 models can be ordered now with lead times 14-16 weeks

3. Additional information

Datasheet now includes the .5 Models.

The Technical Information with the full specifications is updated and available.

A new application note is available explaining the voltage offset test and the different methods to perform

Contact <u>ioseantonio.fernandez@ametek.com</u> in case of questions.

4. FAQ

Q: what's the main advantage of the .5 models?

A. The improved isolation voltage closes a gap we currently have with the .3 models. The voltage offset test required by HV standards i.e. VW 80300, LV 123 etc. is limited to EUT supply voltages of 560 VDC. With the .5 it is possible to perform the voltage offset test up to 1000VDC.

All regions, all customers

Q: which net.control version supports the .5 models?

A: from V3.0 which launches in September 2019

Q: what is the voltage offset test?

A: read the application note for more detailed explanations

Q: who should buy the .5 models instead of the .3 models?

A: everyone that wants to perform voltage offset tests for electrical vehicle high voltage components with voltages > 560 VDC.











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Q: can the .5 be retrofitted to installed NetWaves?

Y: yes, but it requires the unit to come back to the factory. The upgrade cannot be performed onsite or in other a service center.

Q: can the .5 models be used for harmonics, flicker, aerospace and defense tests? A: yes, the .5 have the same performance as the .3 models for these applications.



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