



## Amplifier Upgrade

### ■ REPLACEMENT AMPLIFIER

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Conversely, amplifiers used for vibration systems are built from standard electronic parts and these parts are made obsolete by the electronics industry, typically after 10 to 15 years. It therefore becomes increasingly difficult to maintain and support an amplifier.

To preserve the investment in the well-running shaker and keep the system running, replacing the amplifier has been increasing in popularity. With IMV's ECO-amplifier technology, this replacement amplifier program can bring exactly the same benefits of energy saving, low noise operation, improved service support, high shock velocity capability, and so on as experienced with IMV's ECO-systems.

### ■ ONE REPLACEMENT AMPLIFIER, SEVERAL SHAKERS

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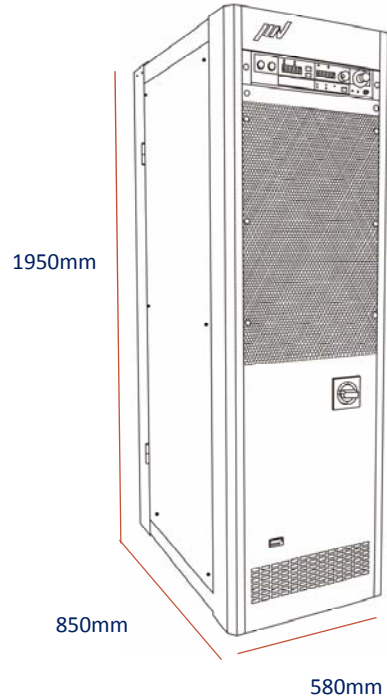
- Support for an upgrade program; replace the oldest amplifier and run with the oldest shaker. At a later date, replace the old shaker with a new system and move the replacement ECO-amplifier to the next oldest shaker
- Two existing but different shakers for different applications. Install an ECO-amplifier and switch between two (or more) shakers, the field and blower are adjusted to suit the requirements of each shaker.



**eco-shaker**



SA1M, 10kVA OUTPUT TYPE



Model	SA1M-Mi40-ISM-CE	SA1M-V824-ISM-CE
Type	Digital Switching amplifier in 19" rack.	Digital Switching amplifier in 19" rack.
Size(mm) W×H×D	580×1950×850	580×1950×850
Mass	Approx. 420kg	Approx. 420 kg
Frequency Range	DC-5000Hz	DC-5000Hz
Frequency Response	DC-5000Hz±3dB	DC-5000Hz±3dB
Cooling Method	Air cooling	Air cooling
Input Impedance	Over 10kΩ	Over 10kΩ
Power Consumption	22kVA	34kVA
Drive Output	10kVA (max. 100 Vrms, 100 Arms, 300 Apeak)	10kVA (max. 100 Vrms, 100 Arms, 300 Apeak)
Field Supply	max. 30 Amp, 280 Volt	max. 90 Amp, 280 Volt
Degauss Coil	It is possible to provide the degauss supply from the field supply	It is possible to provide the degauss supply from the field supply
Cooling Fan	Max. 5.5 kW	Max. 7 kW
Total max power of Field and Cooling fan	12kW	21 kW
Replacement Target	V830/SPA5K-10K V850/SPA5K-10K V706L, V710L, V712, V714, V716, V721	V726, V730-185, V730-335 V805HZ (series), V806, V806LZ (series), V806HZ (parallel)



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## SA2M, 20kVA OUTPUT TYPE

Model	SA2M-Mi40-ISM-CE	SA2M-V824-ISM-CE
Type	Digital Switching amplifier in 19" rack.	Digital Switching amplifier in 19" rack.
Size(mm) W×H×D	580×1950×850	580×1950×850
Mass	Approx. 440kg	Approx. 440kg
Frequency Range	DC-5000Hz	DC-5000Hz
Frequency Response	DC-5000Hz±3dB	DC-5000Hz±3dB
Cooling Method	Air cooling	Air cooling
Input Impedance	Over 10kΩ	Over 10kΩ
Power Consumption	29kVA	41kVA
Drive Output	20kVA (max. 100 Vrms, 200 Arms, 600 Apeak)	20kVA (max. 100 Vrms, 200 Arms, 600 Apeak)
Field Supply	max. 30 Amp, 280 Volt	max. 90 Amp, 280 Volt
Degauss Coil	It is possible to provide the degauss supply from the field supply	It is possible to provide the degauss supply from the field supply
Cooling Fan	Max. 5.5 kW	Max. 7 kW
Total max power of Field and Cooling fan	12kW	21 kW
Replacement Target	V850/SPA15K-20K	V724 MK1, V724 MK2, V725, V804, V804LS, V805LZ(parallel), V810-240, V810-440, V826, V826LS, V860LZ (parallel), V860HDLZ(parallel)



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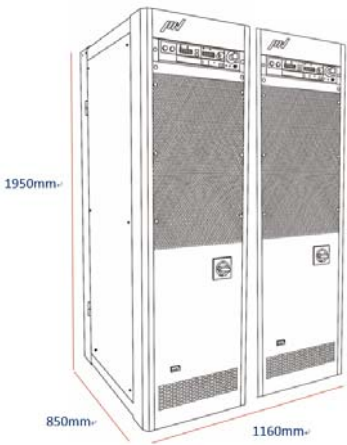
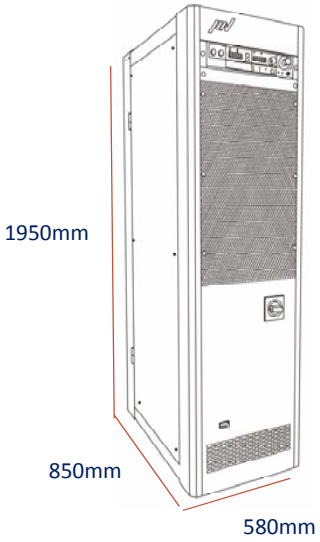
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**eco-shaker**



**SA3M, 30kVA OUTPUT TYPE**



Model	SA3M-Mi40-ISM-CE	SA3M-V824-ISM-CE	SA3M-Mi50-ISM-CE
Type	Digital Switching amplifier in 19" rack.	Digital Switching amplifier in 19" rack.	Digital Switching amplifier in 19" rack.
Size(mm) W×H×D	580×1950×850	580×1950×850	1160×1950×850
Mass	Approx. 460kg	Approx. 460kg	Approx. 880kg
Frequency Range	DC-5000Hz	DC-5000Hz	DC-5000Hz
Frequency Response	DC-5000Hz±3dB	DC-5000Hz±3dB	DC-5000Hz±3dB
Cooling Method	Air cooling	Air cooling	Air cooling
Input Impedance	Over 10kΩ	Over 10kΩ	Over 10kΩ
Power Consumption	36kVA	48kVA	52kVA
Drive Output	30kVA (max. 100 Vrms, 300 Arms, 900 Apeak)	30kVA (max. 100 Vrms, 300 Arms, 900 Apeak)	30kVA (max. 100 Vrms, 300 Arms, 900 Apeak)
Field Supply	max. 30 Amp, 280 Volt	max. 90 Amp, 280 Volt	max. 90 Amp, 280 Volt
Degauss Coil	It is possible to provide the degauss supply from the field supply	It is possible to provide the degauss supply from the field supply	It is possible to provide the degauss supply from the field supply
Cooling Fan	Max. 5.5kW	Max. 7kW	Max. 11kW
Total max power of Field and Cooling fan	12kW	21kW	24.4kW
Replacement Target	V850/SPA25K-30K	V824 MK1, V824 MK2, V824LS MK1, V825L	V870/SPA25K, V875/SPA25K-30K, V890/SPA25K-30K, V894/SPA25K-30K



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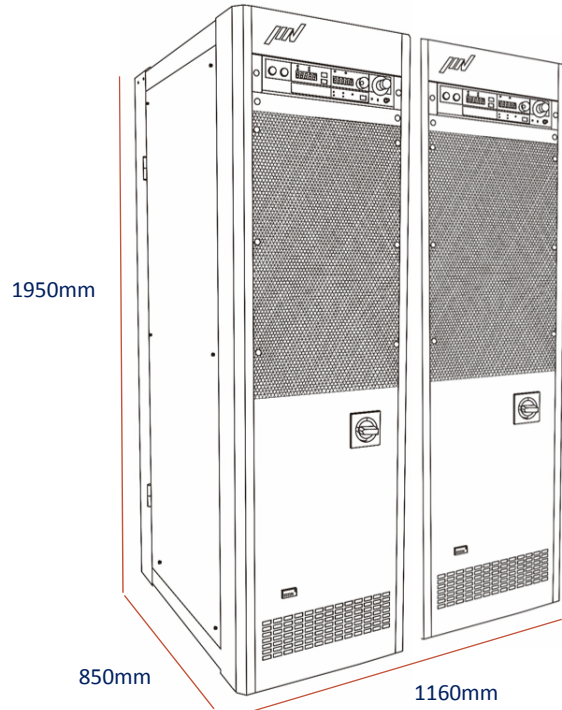
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**eco-shaker**



### SA4M, 40kVA OUTPUT TYPE

Model	SA4M-Mi50-ISM-CE
Type	Digital Switching amplifier in 19" rack.
Size(mm) W×H×D	1160×1950×850
Mass	Approx. 900kg
Frequency Range	DC-5000Hz
Frequency Response	DC-5000Hz±3dB
Cooling Method	Air cooling
Input Impedance	Over 10kΩ
Power Consumption	59kVA
Drive Output	40kVA (max. 100 Vrms, 400 Arms, 1,200 Apeak)
Field Supply	max. 90Amp, 280Volt
Degauss Coil	It is possible to provide the degauss supply from the field supply
Cooling Fan	Max. 11kW
Total max power of Field and Cooling fan	24.4kW
Replacement Target	V890/SPA35K-40K, V894/SPA35K-40K





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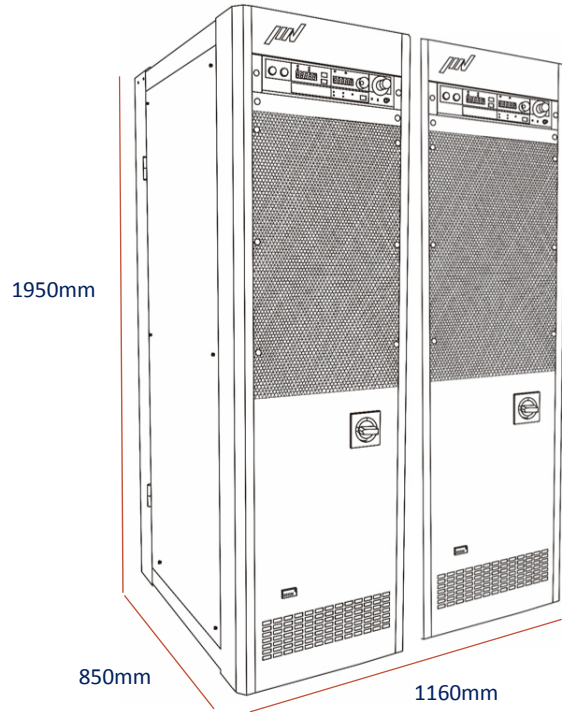
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**eco-shaker**



## SA5M, 50kVA OUTPUT TYPE

Model	SA5M-Mi50-ISM-CE
Type	Digital Switching amplifier in 19" rack.
Size(mm) W×H×D	1160×1950×850
Mass	Approx. 930kg
Frequency Range	DC-5000Hz
Frequency Response	DC-5000Hz±3dB
Cooling Method	Air cooling
Input Impedance	Over 10kΩ
Power Consumption	66kVA
Drive Output	50kVA (max. 100 Vrms, 500 Arms, 1,500 Apeak)
Field Supply	max. 90Amp, 280Volt
Degauss Coil	It is possible to provide the degauss supply from the field supply
Cooling Fan	Max. 11kW
Total max power of Field and Cooling fan	24.4kW
Replacement Target	V890/SPA45K-50K, V894/SPA45K-50K V890, V894