

# XMV Series

Universal Multi-Voltage Battery Charger and Conditioner




## XMV Series


Universal Multi-Voltage Battery Charger and Conditioner

- Universal battery charger with IGBT-Hybrid high-frequency control
- All battery chemistries supported
- Optimized for battery cycling, testing, de-sulphation and rejuvenation
- Highly efficient in continuous heavy-duty operation
- High efficiency and power factor (>0.99)
- Fully programmable
- Ultra filtered output current, with near zero ripple
- Standard cabinet IP21 (indoor). Optional cabinet IP54 (outdoor)
- Portable and fixed cabinets available
- Smart user interface with LCD display and complete communication package
- Maximum safety, ultra-low noise operation
- Easy to install, configure, service and repair
- Input voltages and certifications for Worldwide deployment
- Class leading warranty protection
- Seamless integration with wireless battery ID modules
- Automatic Cycler mode, integrated with XBD battery dischargers-analyzers

amperis

[www.amperis.com](http://www.amperis.com)

 AMPERIS PRODUCTS S.L  
Maria Barbeito, 14  
27003, Lugo, Spain

 **Contact**  
+T [+34] 982 20 99 20  
info@amperis.com | [www.amperis.com](http://www.amperis.com)

## DESCRIPTION

The XMV is a multi-voltage, programmable battery charger with universal capabilities. It supports batteries of any type, chemistry, voltage or size, from single cells to large packs.

The unique architecture of the power conversion system combines performance, energy efficiency and robustness, and it makes these systems easily customizable. With standard power ranges from 12 kW to 40 kW and a highly flexible connectivity package, XMV can support all battery lab applications: formation, testing, cycling, desulphation, regeneration.

XMV digital control systems include a set of pre-loaded charging profiles, and it allows the creation of additional, fully customized, profiles. The possibilities are infinite.

The precise output control allows the generation of high-quality charging profiles, consistent and repeatable, even in case of unstable AC input voltage and wide temperature variations.

The absence of output current ripple minimizes the battery temperature rise, while maximizing system efficiency. The XMV is the perfect choice for battery manufacturing facilities, testing and recovery labs, and repair shops.

## SPECIFICATIONS

### USA and CANADA (24-36-48-72-80 VDC)

Model	XMV.12.US	XMV.12.NA	XMV.15.NA	XMV.20.NA	XMV.24.NA	XMV.36.NA
Maximum Output Power	12 kW	12 kW	15 kW	20 kW	24 kW	36 kW
Nominal Battery Voltage	2-96 VDC	2-96 VDC	2-80 VDC	2-96 VDC	2-96 VDC	2-96 VDC
DC Output Voltage Range	0-150 VDC	0-150 VDC	0-150 VDC	0-150 VDC	0-150 VDC	0-150 VDC
Max DC Current @ 24/48/80 VDC	200/200/150 AMPS	200/200/150 AMPS	250/250/188 AMPS	320/320/200 AMPS	400/400/240 AMPS	600/600/360 AMPS
Connector	Single	Single	Single	Single or Dual	Single or Dual	Single or Dual
AC Input Voltages	3x208/240/480 VAC	3x480/600 VAC	3x480/600 VAC	3x480/600 VAC	3x480/600 VAC	3x480/600 VAC
AC input current	39 A @ 208 VAC 17 A @ 480 VAC	17 A @ 480 VAC 14 A @ 600 VAC	20 A @ 480 VAC 17 A @ 600 VAC	27 A @ 480 VAC 22 A @ 600 VAC	34 A @ 480 VAC 27 A @ 600 VAC	50 A @ 480 VAC 40 A @ 600 VAC
Power Factor	>0.98	>0.98	>0.98	>0.99	>0.99	>0.99
Idle power	<10 W	<10 W	<10 W	<10 W	<10 W	<10 W
Cabinet Type	TL	TL	TL	TP	TP	TP
Safety	UL 1564 4th Edition 2015 "Industrial Battery Chargers"   CSA C22.2 No. 107.2 01 - R2016 "Battery Chargers"					
Standards	NRTL Certification: QPS - file LR1649					



### UROPE, ASIA, OCEANIA and SOUTH AMERICA (24-36-48-72-80 VDC)

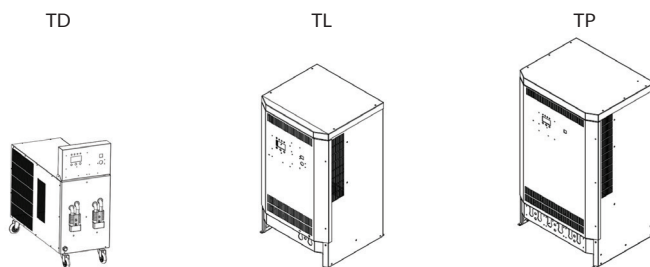
Model	XMV.12.EU	XMV.15.EU	XMV.20.EU	XMV.24.EU	XMV.30.EU	XMV.36.EU
Maximum Output Power	12 kW	15 kW	20 kW	20 kW	30 kW	40 kW
Nominal Battery Voltage	2-96 VDC	2-96 VDC	2-96 VDC	2-96 VDC	2-96 VDC	2-96 VDC
DC Output Voltage Range	0-150 VDC	0-150 VDC	0-150 VDC	0-150 VDC	0-150 VDC	0-150 VDC
Max DC Current @ 24/48/80 VDC	200/200/150	250/250/188	250/250/200	320/320/250	500/500/375	600/600/500
Connector	Single	Single	Single	Single	Single or Dual	Single or Dual
AC Input Voltages	3x400 VAC	3x400 VAC	3x400 VAC	3x400 VAC	3x400 VAC	3x400 VAC
AC input current	20 A	25 A	32 A	41 A	48 A	63 A
Power Factor	>0.98	>0.98	>0.99	>0.99	>0.99	>0.99
Idle power	<10 W	<10 W	<10 W	<10 W	<10 W	<10 W
Cabinet Type	TL	TL	TP	TP	TP	TP
Safety	IEC 60335-1:2010   EN IEC 61000-6-2:2019, EN 61000-6-4:2007, EN 61000-6-4:2007/A1:2011					
Standards	2011/65/EU "RoHS"					



## PORTABLE UNITS (EURO and US AC input)

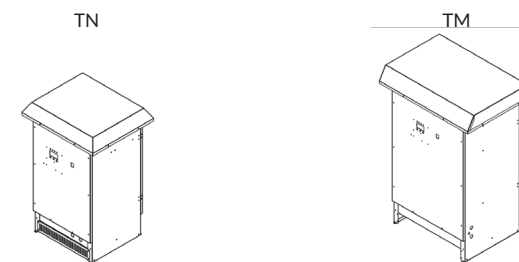
Model	XMV.M.50.EU	XMV-M.80.EU	XMV.M.50.US
Maximum Output Power	3 kW	3 kW	3 kW
Nominal Battery Voltage	2-80 VDC	2-48 VDC	2-80 VDC
DC Output Voltage Range	0-120 VDC	0-70 VDC	0-180 VDC
Max DC Current @ 24/48/80 VDC	50/50/25	80/50/X	50/50/25
Connector	Single	Single	Single
AC Input Voltages	1x230 VAC	1x230 VAC	1x208/240 VAC
AC input current	15 A	15 A	20 A
Power Factor	>0.9	>0.9	>0.9
Idle power	<10 W	<10 W	<10 W
Cabinet Type	TD	TD	TD
Safety, EMC and environmental	IEC 60335-1:2010 EN IEC 61000-6-2:2019, EN 61000-6-4:2007, EN 61000-6-4:2007/A1:2011	UL 1564 4th Edition 2015 "Industrial Battery Chargers" CSA C22.2 No. 107.2 01 - R2016 "Battery Chargers"	
Standards	2011/65/EU "RoHS"	NRTL Certification: QPS - file LR1649	

## DIMENSIONS - STANDARD CABINETS (IP21)



	mm	mm	mm
Width	335	538	717
Depth	690	487	559
Height	530 (756 with raised keyboard)	926	1210

## DIMENSIONS - OUTDOOR CABINETS (IP54)



	mm	mm
Width	659	887
Depth	612	716
Height	1019	1318