

## Environment

	Operating	Storage
Temperature	0 °C to 40 °C (32 °F to 104 °F) without load derating.	-25 °C to 55 °C (-13 °F to 131 °F) for systems without batteries.
Relative humidity	0-95% non-condensing	10-80% non-condensing
Elevation	<p>Designed for operation in 0-3000 m (0-10000 feet) elevation.</p> <p>Derating required from 1000-3000 m (3300-10000 feet) with forced air cooling:            Up to 1000 m (3300 feet): 1.000            Up to 1500 m (5000 feet) : 0.975            Up to 2000 m (6600 feet): 0.950            Up to 2500 m (8300 feet): 0.925            Up to 3000 m (10000 feet): 0.900</p> <p>Derating required from 1000-3000 m (3300-10000 feet) with convection cooling:            Up to 1000 m (3300 feet): 1.000            Up to 1500 m (5000 feet) : 0.985            Up to 2000 m (6600 feet): 0.970            Up to 2500 m (8300 feet): 0.955            Up to 3000 m (10000 feet): 0.940</p>	
Audible noise one meter (three feet) from unit	62 dB at 70% load 69.5 dB at 100% load for 400 V systems 68 dB at 100% load for 480 V systems	
Protection class	IP20	
Color	RAL 9003, gloss level 85%	

## Compliance

Safety	IEC 62040-1: 2008-06, 1st edition Uninterruptible Power Systems (UPS) - Part 1: General and safety requirements for UPS IEC 62040-1: 2013-01, 1st edition amendment 1 UL 1778 5th edition
EMC/EMI/RFI	IEC 62040-2: 2016-11, 2nd edition Uninterruptible Power Systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements C2 FCC Part 15 Subpart B, Class A IEEE C62.41-1991 Location Category B2, IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits
Performance	Performance in accordance with: IEC 62040-3: 2011-03, 2nd edition Uninterruptible Power Systems (UPS) - Part 3: Method of specifying the performance and test requirements.  Output performance classification (according to IEC 62040-3, Clause 5.3.4): VFI-SS-111
Transportation	IEC 60721-4-2 Level 2M2
Seismic	ICC-ES AC 156 (2015); OSHPD Pre-approved; Sds=1.45 g for z/h=1 and Sds=2.00 g for z/h=0; Ip=1.5
Earthing system	TN, TT, TNC, IT  Solid-grounded, HRG

## Regional Seismic Compliance

Certificate available upon request.

Country/Region	Code ID	Hazard level ground	Hazard level roof
Argentina	INPRES-CIRSOC103	Zone 4	Zone 4
Australia	AS 1170.4-2007	Z = 0.22	Z = 0.22
Canada <sup>15</sup>	2020 NBCC	S <sub>a</sub> = 1.95	S <sub>a</sub> = 1.44
Chile	NCh 433.Of1996	Zone 3	Zone 2
China	GB 50011-2010 (2016)	α <sub>Max</sub> = 1.4	α <sub>Max</sub> = 0.9
Europe	Eurocode 8 EN1998-1	α <sub>gR</sub> = 0.375	α <sub>gR</sub> = 0.25
India	IS 1893 (Part 1) : 2016	Z = 0.36	Z = 0.36
Japan	Building Standard Law	Zone A	Zone A
New Zealand	NZS 1170.5:2004+A1	Z = 0.54	Z = 0.37
Peru	N.T.E. - E.030	Zone 4	Zone 4
Russia	SNIP II-7-81 (SP 14.13330.2014)	MSK 9	MSK 9
Taiwan	CPA 2011 Seismic Design Code	S <sub>S</sub> <sup>D</sup> = 0.8	S <sub>S</sub> <sup>D</sup> = 0.8
U.S.A. <sup>15</sup>	ASCE 7-16 / IBC 2018	S <sub>DS</sub> = 1.98	S <sub>DS</sub> = 1.45

15. OSHPD Pre-approved in accordance with AC156 test protocol.