

## 6. Technical data

### 6.1. Technical specifications

Orion XS 1400 DC-DC battery charger	
Input voltage range	9-35V
Output voltage adjust range	10-35V
Output voltage tolerance	+/- 0.25% (max)
Output voltage noise	10mV rms
Input and output current setting range	1 - 50A
Maximum constant short-circuit current	50A
Continuous output power up to 40 °C <sup>1)</sup>	1400W <sup>4)</sup>
Maximum efficiency	98.5%
No-load current consumption	< 100mA
Standby current consumption	< 1.5mA
Can be used as power supply	Yes, output voltage can be set with VictronConnect App
Communication ports	
VictronConnect App / Bluetooth Smart	Yes
Bluetooth power and frequency	+4dBm   2402 - 2480 MHz
VE.Smart Networking	Yes <sup>2)</sup>
VE.Direct	Yes (including DVCC) <sup>3)</sup>
Other	
Operating temperature range	-20 to +60 °C (derating 1.5% per °C above 40 °C)
Humidity	95 % non-condensing
Maximum altitude	2000 m
Pollution degree	PD2
Overvoltage category	OVC 1
Protection category	IP65
DC connection	Screw terminals
Maximum cable cross-section	4AWG (21.2mm <sup>2</sup> )
Weight	0.520 kg (1.14 lb)
Dimensions h x w x d	138.1 x 124.4 x 53mm (5.44 x 4.9 x 2.1 inch)
Standards	
Safety	IEC 62477-1
EMC	FCC 15B, ICES-003, EN 300 328 - pending, EN 301 489-1 - pending, EN 301 489-17 - pending
Automotive Directive	ECE R10-6 - pending
<sup>1)</sup> This applies to optimal cooling where the product is mounted as indicated in the manual with sufficient free space. In case of limited cooling, e.g. due to insufficient airflow, the charging current will be regulated back sooner. With an improved airflow (e.g. forced airflow), derating will take place far above $t_{amb}$ 40°C.	
<sup>2)</sup> VE.Smart Networking features will be receiving Vsense, Tsense and Isense data from the wireless network, for example from a SmartShunt, BMV or Smart Battery Sense. Synchronised charging is not supported.	
<sup>3)</sup> DVCC compatibility requires Orion XS firmware v1.03 or later and Venus OS firmware v3.20 or later on the GX device.	
<sup>4)</sup> This value represents the nominal power level at a typical voltage of 28V. Power is calculated as the product of the applied voltage and current ( $P = V \times I$ ). Examples: 12V × 50A = 600W, 14V × 50A = 700W, 28V × 50A = 1400W	