

450W



DC-DC Converter
HS Sealed Series

Model
649 HS

Design Features

- Wide Range Input Voltage
- High Efficiency Design
- Hi Ingress Rating, IP 676
- Adjustable Output Voltage
- Optional Remote Output Voltage Sensing
- Optional Remote On/Off switching
- Low Voltage cutout
- High Voltage cutout
- Electronically Current Limited
- Thermally Protected
- Low No Load Power Consumption
- I/O Bayonet Quick Connection

MODEL NO.		649 HS
INPUT	NOMINAL INPUT VOLTAGE RANGE	12 VDC to 28 VDC
	MAXIMUM INPUT VOLTAGE RANGE	10.5 to 32.0 (+, - 0.5) VDC
	INPUT CURRENT AT 8A OUTPUT CURRENT	36A @ 11.5 Vin; 48.1 Vout
	INPUT CURRENT AT NO LOAD	<180 mA over entire input & output voltage ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	48.0 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	42.0 VDC to 55.0 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	250 mV (without remote sensing) 50 mV (with remote sensing)
	OUTPUT VOLTAGE REGULATION	< 0.2%
	OUTPUT RIPPLE	50 mV RMS at maximum load (measured at 25C)
	MAXIMUM CONTINUOUS OUTPUT POWER	450 W
	POWER SURGE	550 W
	MAXIMUM LOAD CURRENT	8 ADC, for output voltage setting 42.0 VDC - 55.0 VDC
	WORST CASE EFFICIENCY	94.0% @ 50% max. power, 92.0% @ max. power
PROTECTION	LOW INPUT VOLTAGE SHUTDOWN	< 10.5 +/- 0.3 VDC
	HIGH INPUT VOLTAGE SHUTDOWN	> 32.0 +/- 1.0 VDC
	OVERLOAD SHUTDOWN	Set to shut off at 110% of maximum current with continuous automatic retry
	OVER TEMPERATURE SHUTDOWN	Via internal thermostat, self resetting
	COOLING	By Conduction through base plate and convection
CONNECTIONS	FUSING	Customer accessible
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector
	REMOTE TURN ON	Via pin to -ve on input connector, may be disabled via internal jumper
GENERAL	REMOTE SENSE	Via 2 pins on the output connector usage is optional
	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
GENERAL	OPERATING HUMIDITY	100%
	INGRESS RATING	IP 676
	MOUNTING SLOT CENTERS (in./cm.)	6.0 x 7.3 / 15.2 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	9.5 x 8.0 x 2.9 / 24.1 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
	WEIGHT, (lb./kg.)	10 / 4.5

NOTE: Specifications are subject to change without notice.

Rev 7/15/2015