



SEALED DC-DC CONVERTERS



SELECTOR GUIDE
2021 EDITION

Dependable Operation in Extreme Environments

SEC America's HS Series of sealed high power DC-DC converters has been designed for the environmentally most challenging applications.

HS Series DC-DC converters deliver physical durability, operating reliability, and long life in any terrestrial and unsubmerged marine environment. Among the characteristics of these high power units are:

- Wide temperature range operation
- Shock and vibration resistance
- High Ingress Ratings
- Internal component protection through encapsulation
- Electronic protection against overloads
- Quick Mounting
- Easy Connection
- Cool operation
- High MTBF

SEC America's DC-DC converters are engineered and manufactured in the United States. From our facility in Burlington, VT, innovations are incorporated while support and application guidance are offered to customers sourcing for both established and future projects. We stand behind each and every product that goes out of our doors. Our development engineering and manufacturing teams maintain a continuous interaction during the production life span of our products introducing improvements as components evolve. The result is proven, fully-tested units at the end of the production line.

Through years of experience, we have developed an industry-leading reputation for providing power converter products that meet a wide range of requirements. As technology continues to grow, new applications constantly arise. At SEC America we are at the ready to meet their power demands.

Our years of experience have made us adept at building to custom specifications. Numerous mechanical options and successful circuit topologies have become standardized at SEC, leading to fast turn arounds for new custom models. Our highly qualified engineering staff is ready to match a unit design to your exact requirements.

LIMITED WARRANTY

We warrant each instrument, sold by us, or our authorized agents, to be free from defects in material and workmanship and that it will perform within applicable specifications for a period of two years after original shipment. Our obligation under this guarantee is limited to repairing or replacing any instrument or any part thereof, except fuses and pilot lights, which shall within two years after delivery to the original purchaser, be returned to us with transportation charges prepaid, prove after our examination to be thus defective.

The above limited warranties take the place of all other warranties, expressed or implied, and correction of such defects by replacement or repair shall constitute a fulfillment of all obligations under the terms of the warranties. The warranties do not cover any unit that has been damaged either in transit or by misuse, accident, or negligence. No warranty or representation by anyone other than this Company shall be binding on us.

TO RETURN A UNIT, SEND TO THE FOLLOWING ADDRESS:

SEC America Corp. / 78 Ethan Allen Drive, Suite #3 / South Burlington, VT 05403

CONTACT INFORMATION



P.O. Box 2266 / South Burlington, VT 05407

TEL (802) 865-8388 / FAX (802) 865-8389

sales@secamerica.com / **secamerica.com**

Cable Assembly Specification 68-0749-6



Cable Length: 72 inches tip to tip, -0, + 3 inches
 Operating range: -40C to +80C
 Cable Description: P/N 92-CMB SEC Power Link

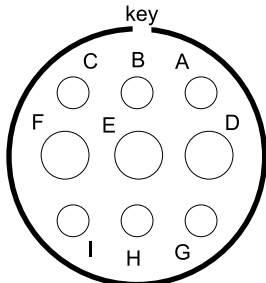
For Down Converters

Pin
A - Output Positive Sense
B - No Connection
C - Output Negative Sense
D - Output Positive
E - Housing Ground
F - Output Negative
G - Input Positive
H - Remote Turn On/Off
I - Input Negative

For Up Converters

Pin	Color	Gauge
A - Output Positive Sense	Blue	18
B - No Connection		
C - Output Negative Sense	White	18
D - Input Positive	Red	8
E - Housing Ground	Green	14
F - Input Negative	Black	8
G - Output Positive	Orange	12
H - Remote Turn On/Off	Yellow	18
I - Output Negative	Brown	12

Input/Output Connector



Cable Connector Front View
Canon 3106E24-11SB

SEC America, Corp.

S. Burlington, VT 05407

Cable Assembly

SIZE A	68-0749-6	REV B
DATE	March 4, 2016	SHEET 1 of 1
Drawn By:		CJ

REV	Changes	Prepared by	Date	Initials
A	Initial Release	CJ	3/4/2015	
B	Up/Down converter pin clarification	DD	10/27/20	
C				

Index

MODEL	VDC In	VDC Out	Output Amps	Technical Specifications	Mechanical Drawing
STEP UP ISOLATED					
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Model 728HS	12-28	24	30	PG. 12	PG. 13
Model 638HS	12-28	36	10	PG. 8	PG. 9
Model 738HS	12-28	36	20	PG. 14	PG. 15
Model 652HS	12-28	48	8	PG. 10	PG. 11
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STEP DOWN ISOLATED					
Model 848HS	44-57	13.6	60	PG. 18	PG. 19
Model 849HS	44-57	13.6	30	PG. 20	PG. 21
Model 850HS	44-57	48	15	PG. 22	PG. 23
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Model 882HS	22-60	13.6	30	PG. 24	PG. 25
Model 884HS	22-60	13.6	60	PG. 26	PG. 27

Isolated Sealed DC-DC Converter



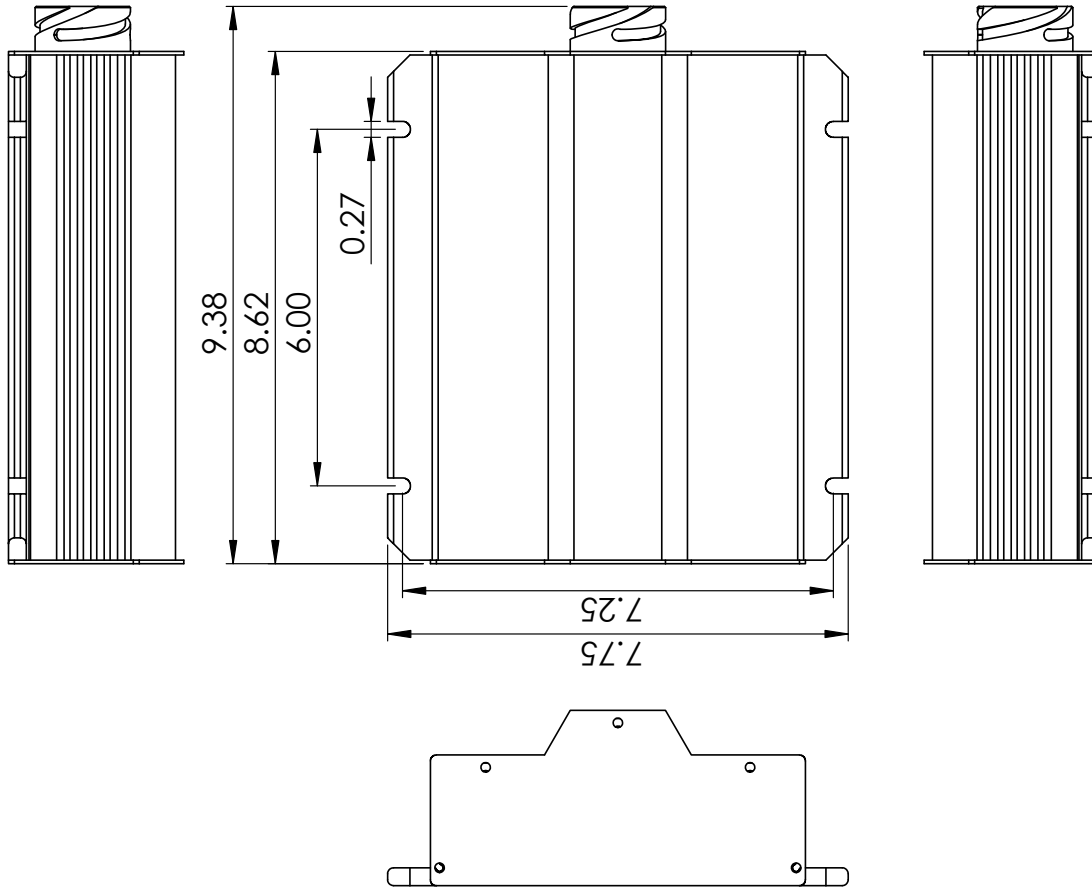
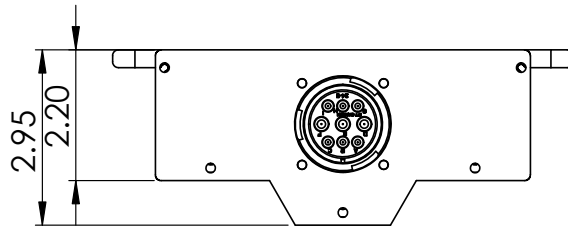
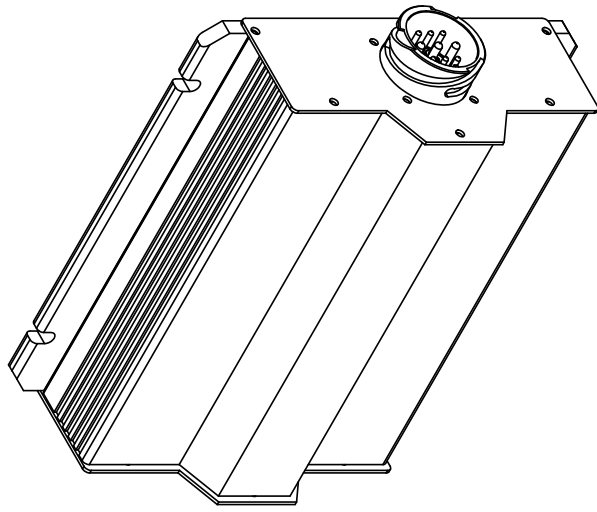
Design Features

- 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.		628 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 15A OUTPUT CURRENT	38A @ 11.5 Vin; 26.0 Vout
	INPUT CURRENT AT NO LOAD	< 150 mA over entire input/output voltage range
OUTPUT	OUTPUT VOLTAGE NOMINAL	26.0 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	16.0 VDC to 28.0 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	<1.6% (with local sensing) <30 mV (with remote sensing)
	OUTPUT VOLTAGE REGULATION	<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	15 ADC, for output voltage setting 16.0 VDC - 28.0 VDC
PROTECTION	EFFICIENCY	Not less than 90% over entire operating range
	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 by front panel removal
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector
	REMOTE TURN ON	Via pin to negative return 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
	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.)	7.0 / 3.2

NOTE: Specifications are subject to change without notice.

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5	4	3	2	1	TITLE:		618HS, 628HS 638HS, 652HS, 882HS Converters		SIZE	DWG. NO.	REV	
					SEC AMERICA CORP 05407		A	17-0628HS				1
					PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SEC. AMERICA CORP. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SEC AMERICA CORP IS PROHIBITED.							
SCALE: 1:3		WEIGHT:		SHEET 2 OF 2								

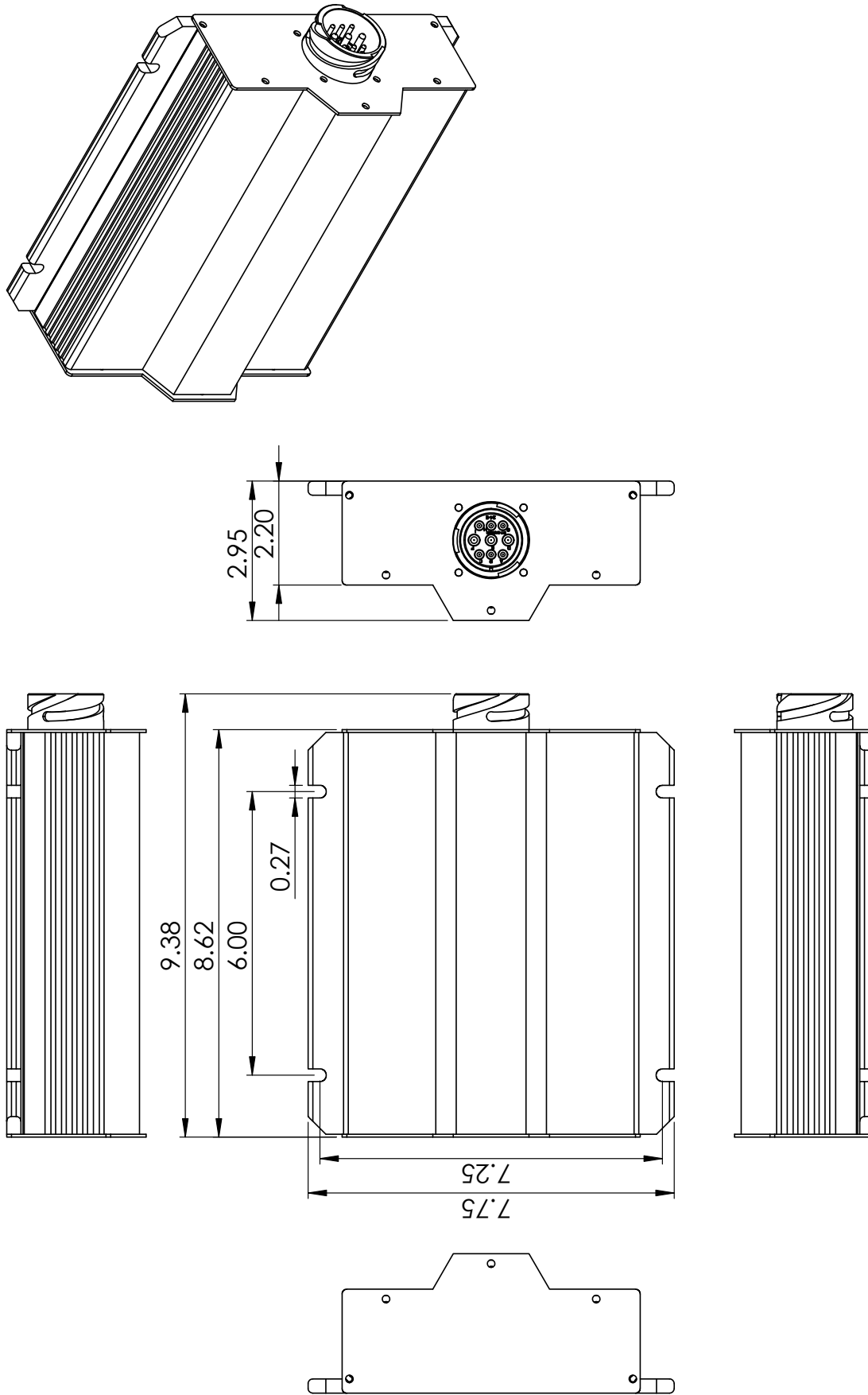
**Design Features**

- 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.		638 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 10A OUTPUT CURRENT	34A @ 11.5 Vin; 36.1 Vout
	INPUT CURRENT AT NO LOAD	<150 mA over entire input/output voltage ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	36.0 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	32.0 VDC to 42.0 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	250 mV (without remote sensing) 50 mV (with remote sensing)
	OUTPUT VOLTAGE REGULATION	<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	10 ADC, for output voltage setting 32.0 VDC - 42.0 VDC
PROTECTION	EFFICIENCY	Not less than 90% over 10% to 100% load range
	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
	REMOTE SENSE	Via 2 pins on the output connector usage is optional
GENERAL	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	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.)	7.0 / 3.2

NOTE: Specifications are subject to change without notice.

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			A		17-0628HS	1	
			SCALE: 1:3		WEIGHT:	SHEET 2 OF 2	
5			4		3	2	1

Model 652HS

Isolated Sealed DC-DC Converter



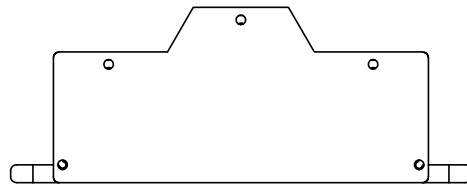
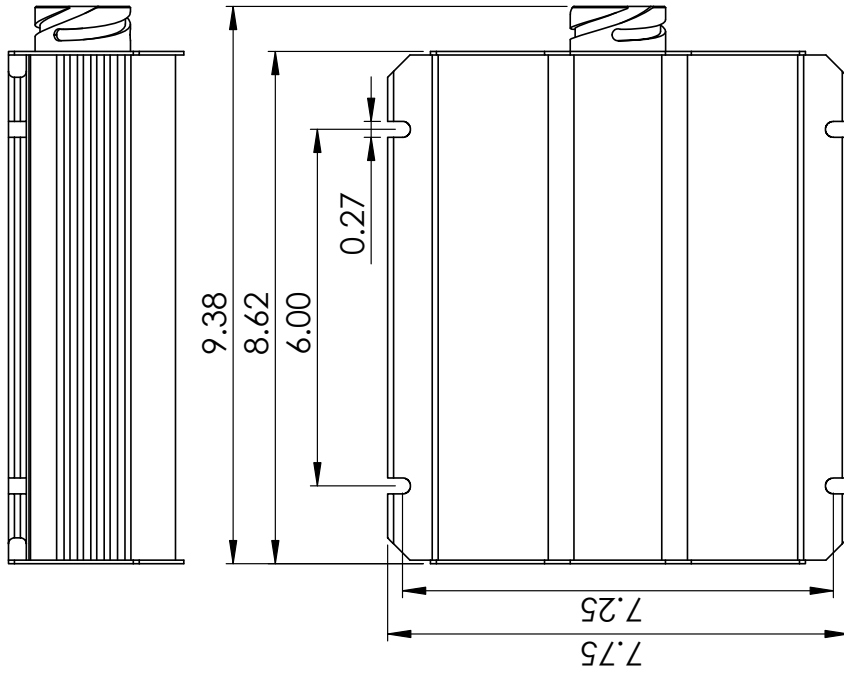
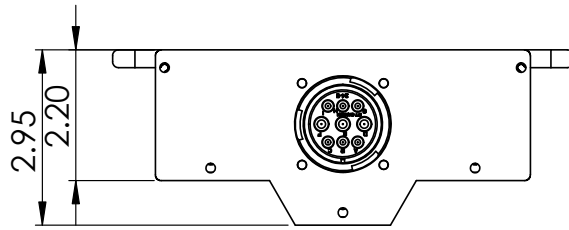
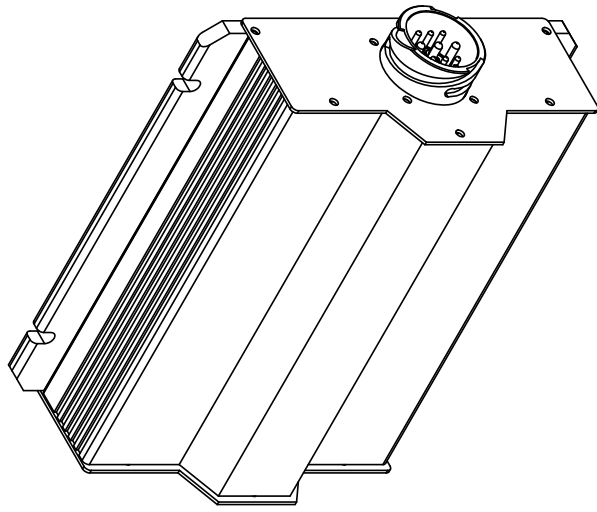
Design Features

- 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.		652 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	34A @ 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
PROTECTION	EFFICIENCY	Not less than 90% over 10% to 100% load range
	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
	REMOTE SENSE	Via 2 pins on the output connector usage is optional
GENERAL	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	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.)	7.0 / 3.2

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			A 17-0628HS		1
			SCALE: 1:3	WEIGHT:	SHEET 2 OF 2
5	4	3	2	1	

Isolated Sealed DC-DC Converter



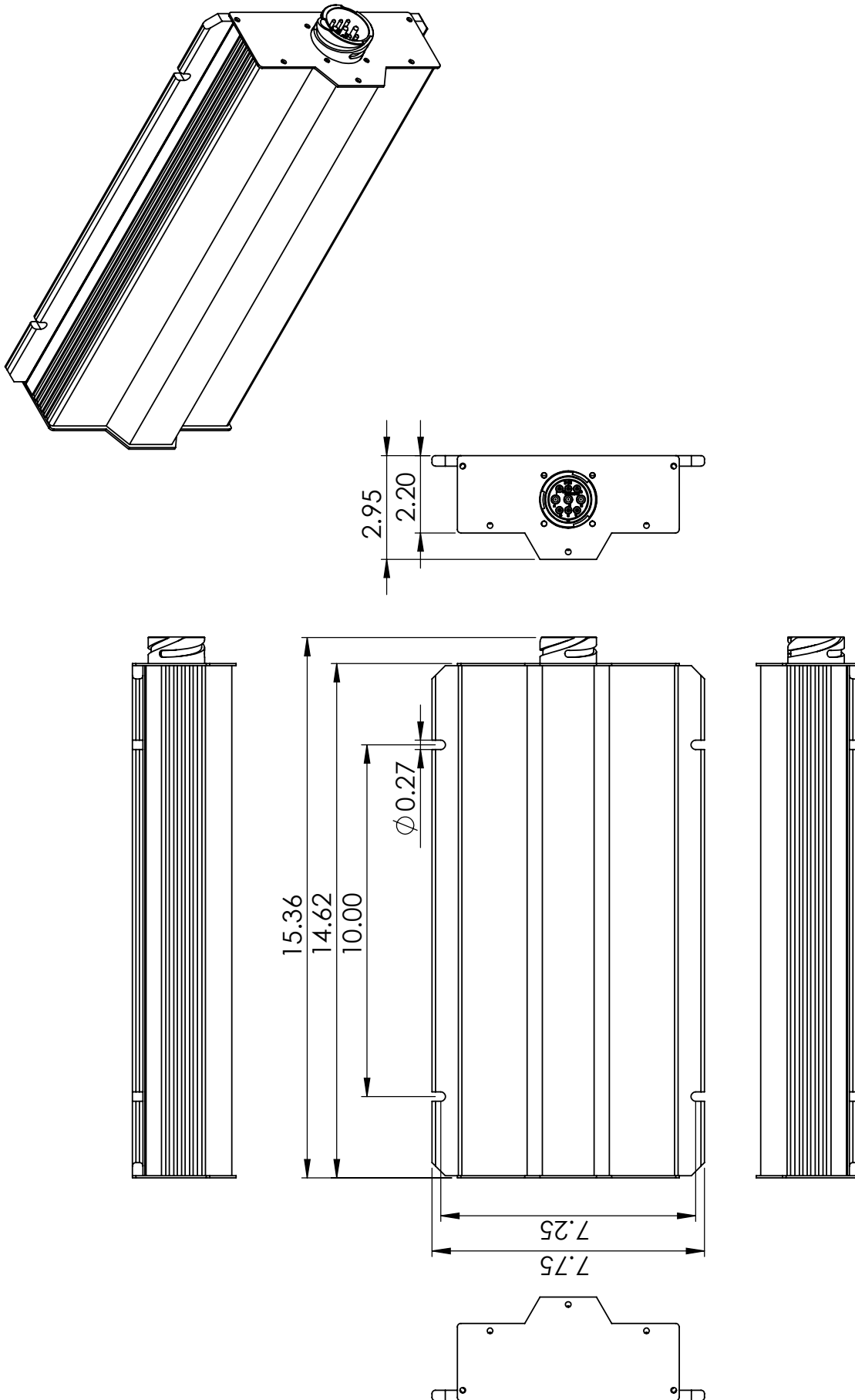
Design Features

- 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.		728 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 32A OUTPUT CURRENT	76A @ 11.5 Vin; 25.5 Vout
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	26.0 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	16.0 VDC to 28.0 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	850 W
	POWER SURGE	1000 W
	MAXIMUM LOAD CURRENT	32 ADC, for output voltage setting 16.0 VDC - 28.0 VDC
PROTECTION	EFFICIENCY	Not less than 90% over entire operating range
	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
	FUSING	Customer accessible by front panel removal
CONNECTIONS	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector
	REMOTE TURN ON	Via pin to -ve on input connector, may be disabled via internal jumper
	REMOTE SENSE	Via 2 pins on the output connector usage is optional
GENERAL	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	OPERATING HUMIDITY	100%
	INGRESS RATING	IP 676
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
WEIGHT, (lb./kg.)		12 / 5.5

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	4	3	2	SCALE: 1:4	WEIGHT:
	5	4	3	2	1

Isolated Sealed DC-DC Converter



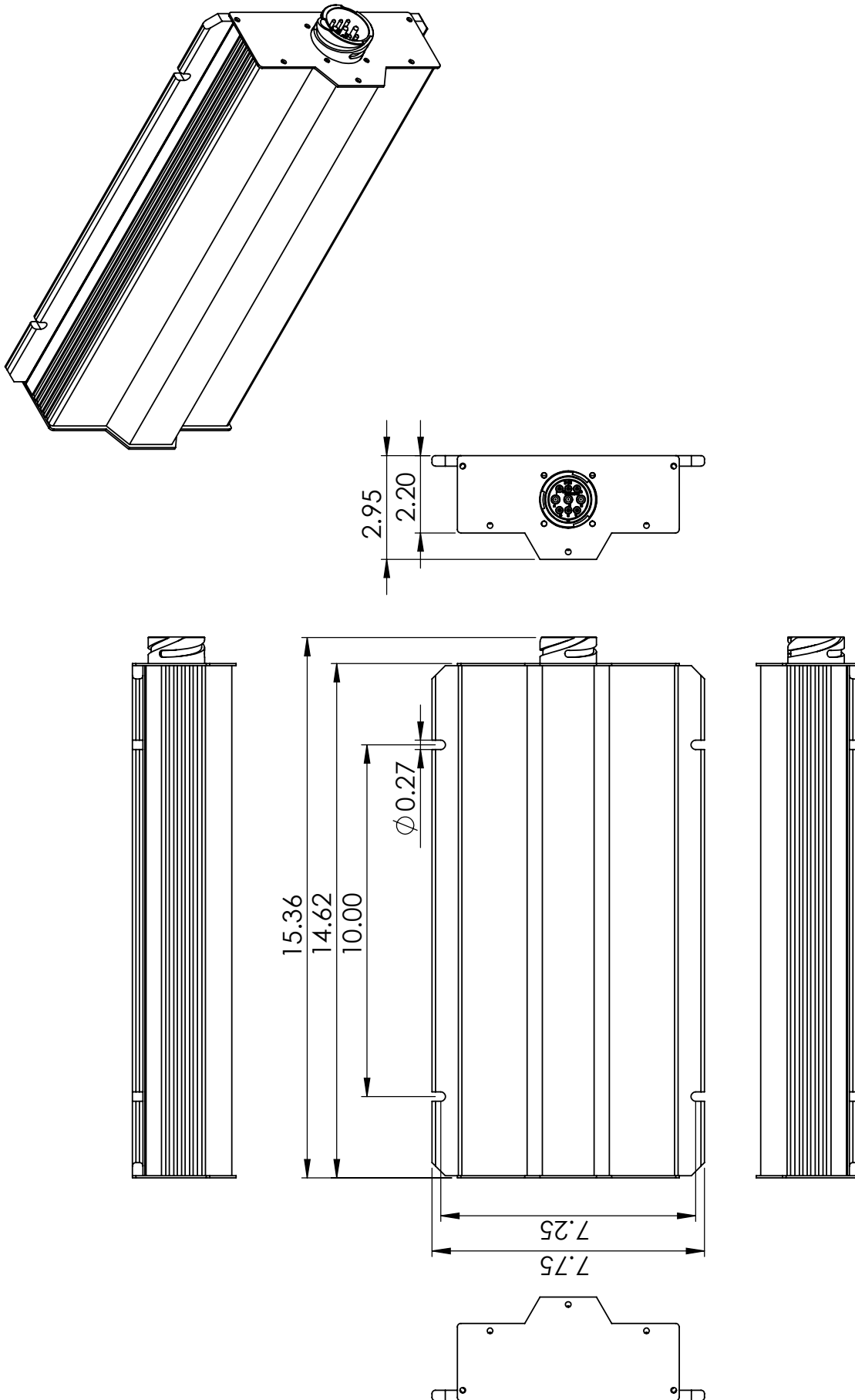
Design Features

- 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.		738 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 20A OUTPUT CURRENT	71A @ 11.5 Vin; 36.1 Vout
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	36.0 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	32.0 VDC to 42.0 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	850 W
	POWER SURGE	1000 W
	MAXIMUM LOAD CURRENT	20 ADC, for output voltage setting 32.0 VDC - 42.0 VDC
PROTECTION	EFFICIENCY	Not less than 90% over entire operating range
	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
	FUSING	Customer accessible by front panel removal
CONNECTIONS	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector
	REMOTE TURN ON	Via pin to -ve on input connector, may be disabled via internal jumper
	REMOTE SENSE	Via 2 pins on the output connector usage is optional
GENERAL	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	OPERATING HUMIDITY	100%
	INGRESS RATING	IP 676
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
WEIGHT, (lb./kg.)		12 / 5.5

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5	4	3	2	1

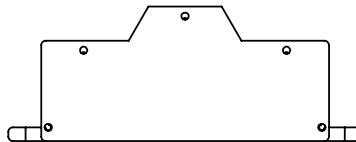
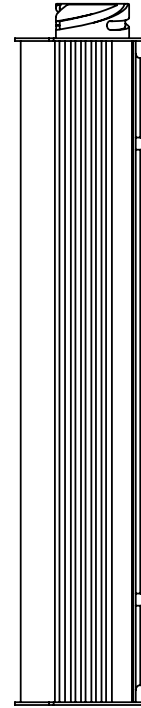
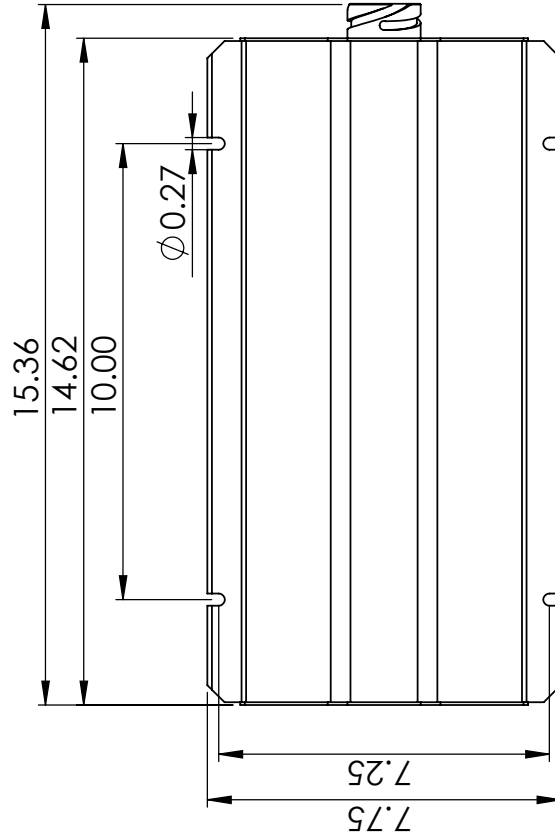
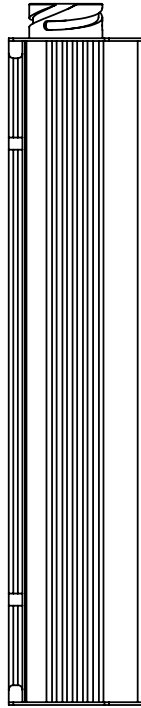
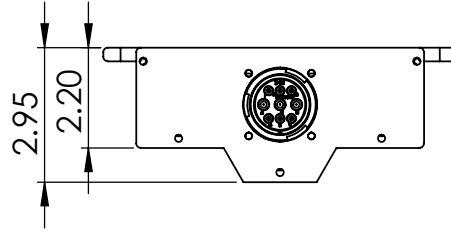
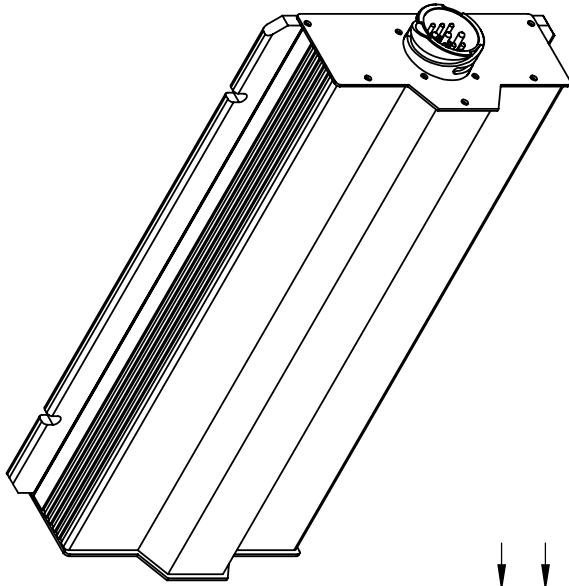
**Design Features**

- 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.		752 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 15A OUTPUT CURRENT	65A @ 12.2 Vin; 48.5 Vout
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output 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	850 W
	POWER SURGE	1000 W
PROTECTION	MAXIMUM LOAD CURRENT	15 ADC, for output voltage setting 42.0 VDC - 55.0 VDC
	EFFICIENCY	Not less than 90% over entire operating range
	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
CONNECTIONS	COOLING	By conduction through base plate and convection
	FUSING	Customer accessible by front panel removal
	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
	OPERATING HUMIDITY	100%
	INGRESS RATING	IP 676
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
	WEIGHT, (lb./kg.)	12 / 5.5

NOTE: Specifications are subject to change without notice.

Rev 7/15/2019



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SEC AMERICA CORP
05407

TITLE: 718HS, 728HS 738HS,
752HS, 848HS, 849HS, 850HS, 884HS
Converters

SIZE **A** DWG. NO. 17-0728HS

REV 1

SCALE: 1:4 WEIGHT:

SHEET 2 OF 2

5

4

3

2

1



48 to 12 VDC Isolated Converter Model 848HS Step-Down Sealed DC-DC Converter

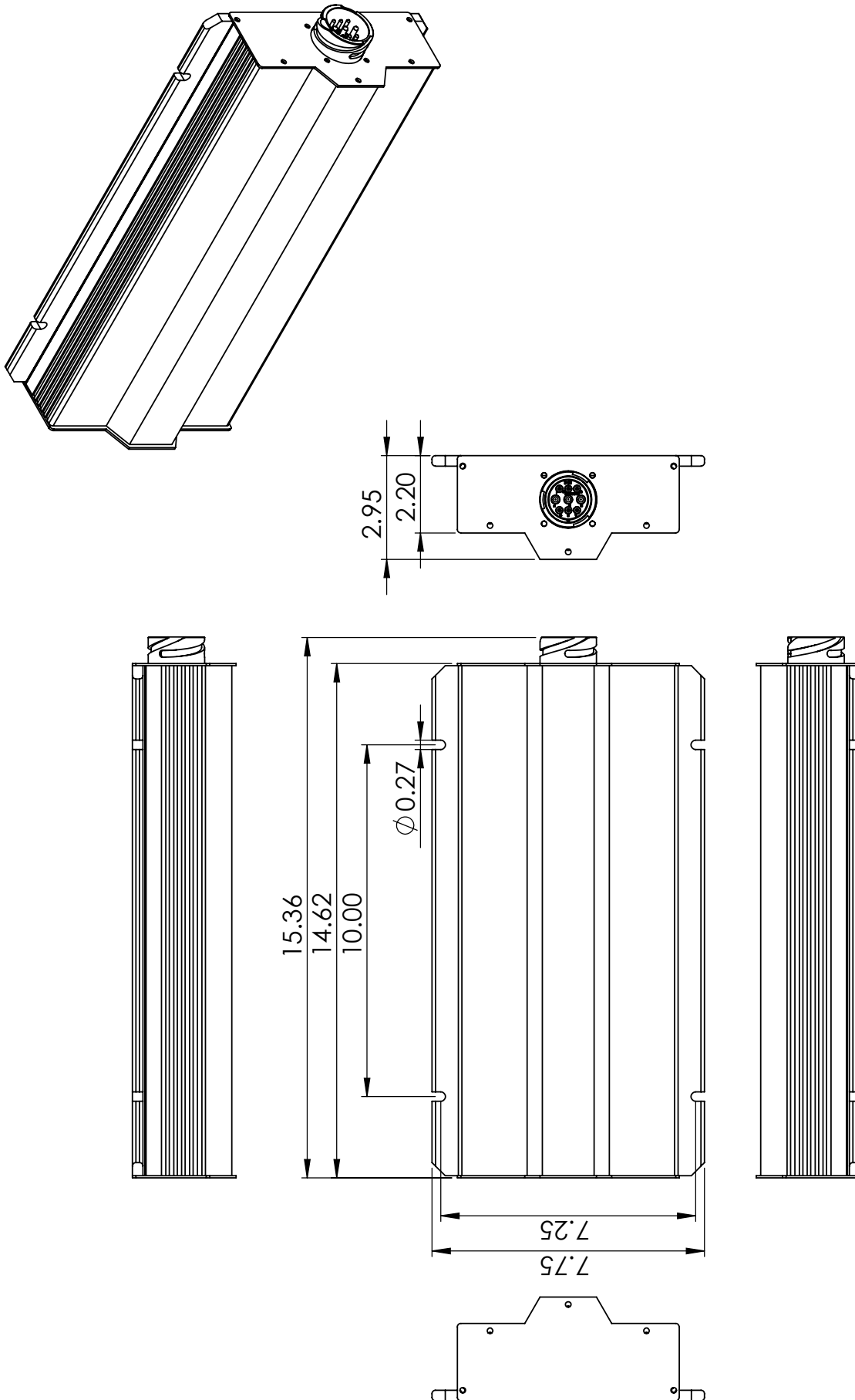
Design Features

- Wide Range Input Voltage
- High Efficiency Design
- Hi Ingress Rating, IP 67
- Adjustable Output Voltage
- Optional Remote Output Voltage Sensing
- Optional Remote On/Off switching
- Low/High Input Voltage Cutouts
- Electronically Current Limited
- Thermally Protected
- Low No Load Power Consumption
- I/O Bayonet Quick Connection

MODEL NO.		848 HS
INPUT	NOMINAL INPUT VOLTAGE RANGE	44 to 57 VDC
	MAXIMUM INPUT VOLTAGE RANGE	40 to 61 VDC
	INPUT CURRENT WITH LOAD AT 60A; 13.0 Vout	19A with input at 48.0 V
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	13.0 +/- 0.1 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	11.8 to 14.5 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	200 mV (without remote sensing) <30 mV (with remote sensing)
	OUTPUT VOLTAGE REGULATION	< 0.2% with input excursions from 46-56 VDC
	OUTPUT RIPPLE	50 mV RMS at maximum load (measured at 25C)
	MAXIMUM CONTINUOUS OUTPUT POWER	800 W
	POWER SURGE	1000 W
	MAXIMUM LOAD CURRENT	60 ADC, for output voltage setting 11.7-13.2 VDC
PROTECTION	EFFICIENCY	Not less than 94% over entire operating range
	LOW INPUT VOLTAGE SHUTDOWN	40V +/- 1V
	HIGH INPUT VOLTAGE SHUTDOWN	61V +/- 1V
	OVERLOAD SHUTDOWN	Knee current limit starting at 110% of maximum current
	ISOLATION	Input/Output-1800V, Input/Housing-2500V
	OVER TEMPERATURE SHUTDOWN	Via internal thermostat, self resetting
	COOLING	By conduction through base plate and convection
CONNECTIONS	FUSING	Customer accessible by front panel removal
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector (see owner's manual)
	REMOTE TURN ON	Via pin H jumpered to -ve Pin I on input connector, may be disabled via internal jumper
GENERAL	REMOTE SENSE	Via 2 pins on the output connector usage is optional (see user manual)
	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	OPERATING HUMIDITY	100% non condensing
	INGRESS RATING	IP 67
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
	WEIGHT, (lb./kg.)	15 /6.8

NOTE: Specifications are subject to change without notice.

Rev 03/06/2019



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48 to 24 VDC Isolated Converter Model 849HS Step-Down Sealed DC-DC Converter

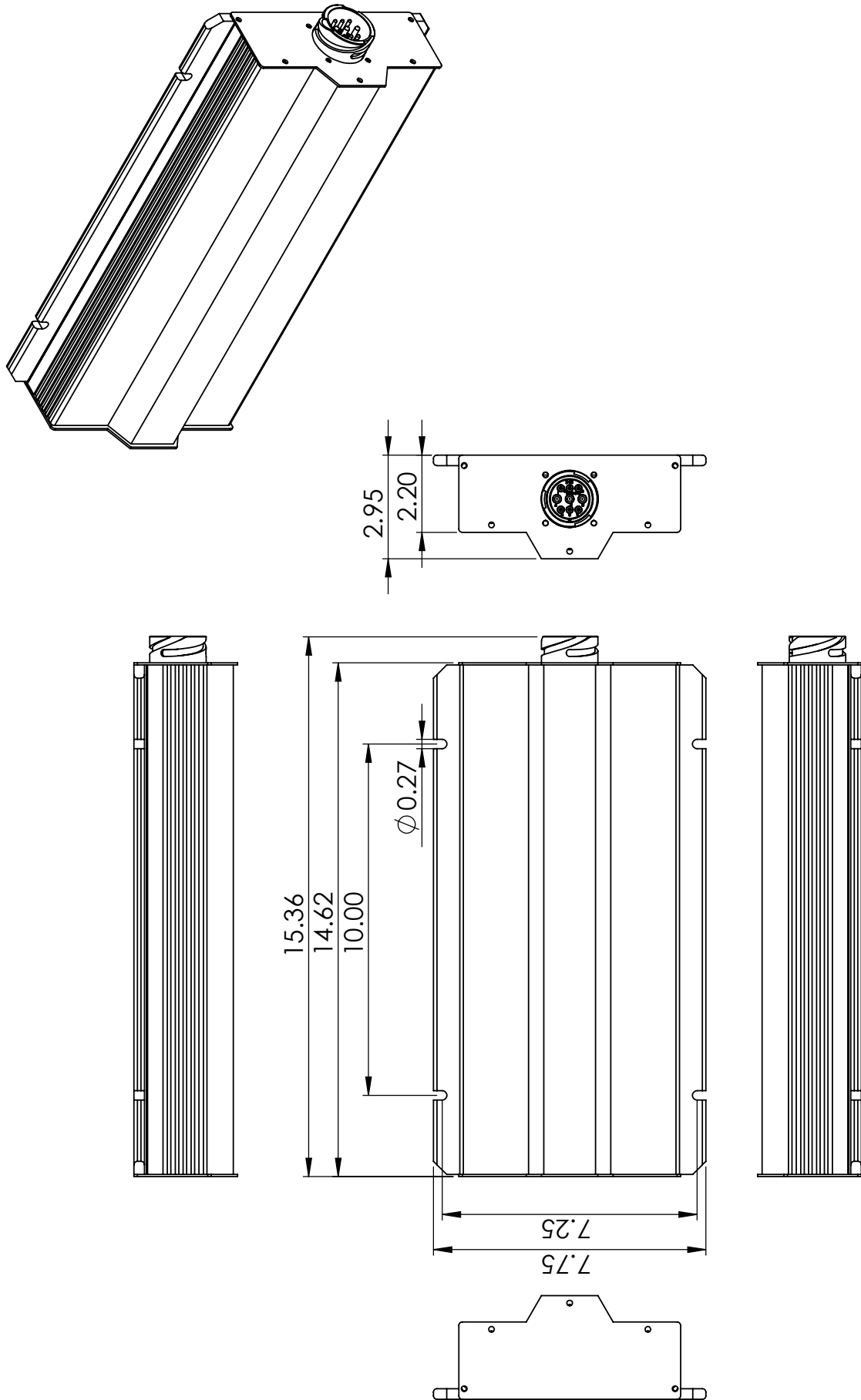
Design Features

- Wide Range Input Voltage
- High Efficiency Isolated Design - 94%
- Hi Ingress Rating, IP 67
- Adjustable Output Voltage
- Optional Remote Output Voltage Sensing
- Optional Remote On/Off Switching
- Low/High Input Voltage Cutouts
- Electronically Current Limited
- Thermally Protected
- Low No Load Power Consumption
- I/O Bayonet Quick Connection

MODEL NO.		849HS
INPUT	NOMINAL INPUT VOLTAGE RANGE	44 to 57 VDC
	MAXIMUM INPUT VOLTAGE RANGE	40 to 61 VDC
	INPUT CURRENT WITH LOAD AT 30A; 26.0 Vout	19A with input at 48.0 V
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	26.0 +/- 0.1 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	23.5 to 27.0 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	200 mV (without remote sensing)
		<30 mV (with remote sensing)
	OUTPUT VOLTAGE REGULATION	< 0.2% with input excursions from 46-56 VDC
	OUTPUT RIPPLE	50 mV RMS at maximum load (measured at 25C)
	MAXIMUM CONTINUOUS OUTPUT POWER	800 W
	POWER SURGE	1000 W
PROTECTION	MAXIMUM LOAD CURRENT	30 ADC, for output voltage setting 23.5-27.0 VDC
	EFFICIENCY	Not less than 94% over entire operating range
	LOW INPUT VOLTAGE SHUTDOWN	40V +/- 1V
	HIGH INPUT VOLTAGE SHUTDOWN	61V +/-1V
	OVERLOAD SHUTDOWN	Knee current limit starting at 110% of maximum current
	ISOLATION	Input/Output-1800V, Input/Housing-2500V
	OVER TEMPERATURE SHUTDOWN	Via internal thermostat, self resetting
CONNECTIONS	COOLING	By conduction through base plate and convection
	FUSING	Customer accessible by front panel removal
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector (see owner's manual)
	REMOTE TURN ON	Via pin H jumpered to -ve Pin I on input connector, may be disabled via internal jumper
GENERAL	REMOTE SENSE	Via 2 pins on the output connector usage is optional (see user manual)
	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	OPERATING HUMIDITY	100% non condensing
	INGRESS RATING	IP 67
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
	WEIGHT, (lb./kg.)	15 /6.8

NOTE: Specifications are subject to change without notice.

Rev 03/06/2020



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	5	4	3	2	1
SCALE: 1:4			WEIGHT:	SHEET 2 OF 2	



48 to 48 VDC Isolated Converter Model 850HS

Regulated Sealed DC-DC Converter

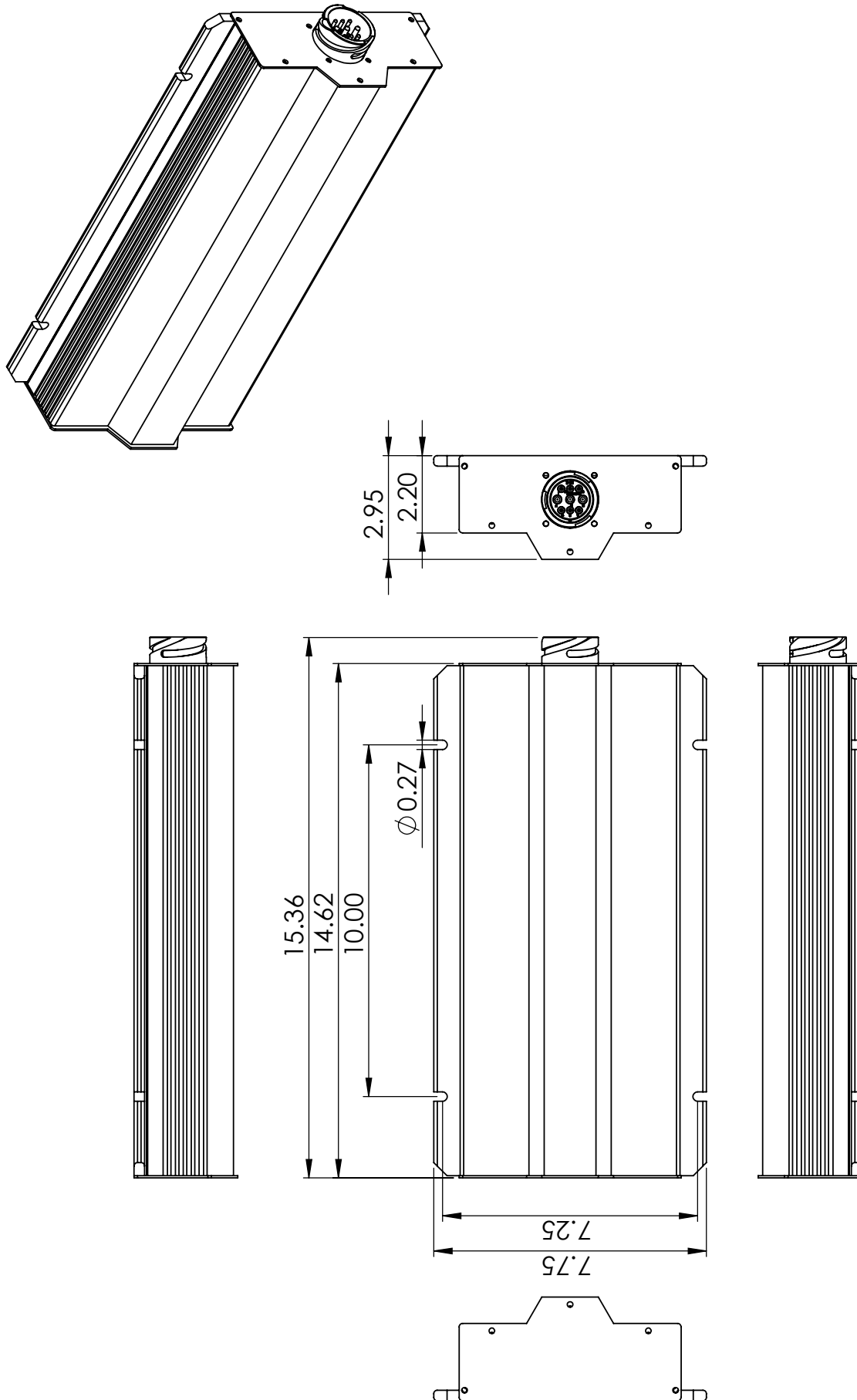
Design Features

- Wide Range Input Voltage
- High Efficiency Isolated Design - 94%
- Hi Ingress Rating, IP 67
- Adjustable Output Voltage
- Optional Remote Output Voltage Sensing
- Optional Remote On/Off Switching
- Low/High Input Voltage Cutouts
- Electronically Current Limited
- Thermally Protected
- Low No Load Power Consumption
- I/O Bayonet Quick Connection

MODEL NO.		850HS
INPUT	NOMINAL INPUT VOLTAGE RANGE	46 to 56 VDC
	MAXIMUM INPUT VOLTAGE RANGE	40 to 61 VDC
	INPUT CURRENT WITH LOAD AT 18A; 48.0 Vout	19.1 A with input at 48.0 V
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	48.0 +/- 0.1 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	46.0 to 54.0 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	200 mV (without remote sensing) <30 mV (with remote sensing 5%-100% Load)
	OUTPUT VOLTAGE REGULATION	< 0.2% with input excursions from 46-56 VDC
	OUTPUT RIPPLE	50 mV RMS at maximum load (measured at 25C)
	MAXIMUM CONTINUOUS OUTPUT POWER	864 W
	POWER SURGE	1000 W
	MAXIMUM LOAD CURRENT	18 ADC, for output voltage setting 46.0-54.0 VDC
PROTECTION	EFFICIENCY	Not less than 94% over entire operating range
	LOW INPUT VOLTAGE SHUTDOWN	40V +/- 1V
	HIGH INPUT VOLTAGE SHUTDOWN	60V +/- 1V
	OVERLOAD SHUTDOWN	Knee current limit starting at 110% of maximum current
	ISOLATION	Input/Output-1800V, Input/Housing-2500V
	OVER TEMPERATURE SHUTDOWN	Via internal thermostat, self resetting
	COOLING	By conduction through base plate and convection
CONNECTIONS	FUSING	Customer accessible by front panel removal
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector (see owner's manual)
	REMOTE TURN ON	Via pin H jumpered to -ve Pin I on input connector, may be disabled via internal jumper
GENERAL	REMOTE SENSE	Via 2 pins on the output connector usage is optional (see user manual)
	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	OPERATING HUMIDITY	100% non condensing
	INGRESS RATING	IP 67
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
	WEIGHT, (lb./kg.)	15 / 6.8

NOTE: Specifications are subject to change without notice.

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SEC AMERICA CORP
05407

TITLE: 718HS, 728HS 738HS,
752HS, 848HS, 849HS, 850HS, 884HS
Converters

SIZE **A** DWG. NO. 17-0728HS

REV 1

SCALE: 1:4 WEIGHT: SHEET 2 OF 2

5

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2

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Model 882 HS

Step Down Sealed DC-DC Converter
Non-Isolated

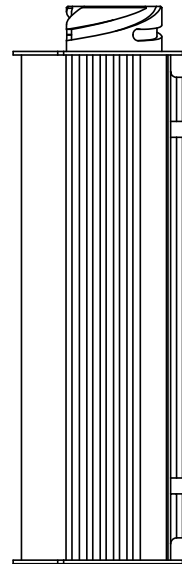
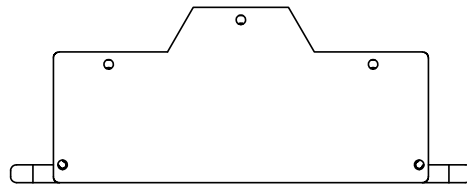
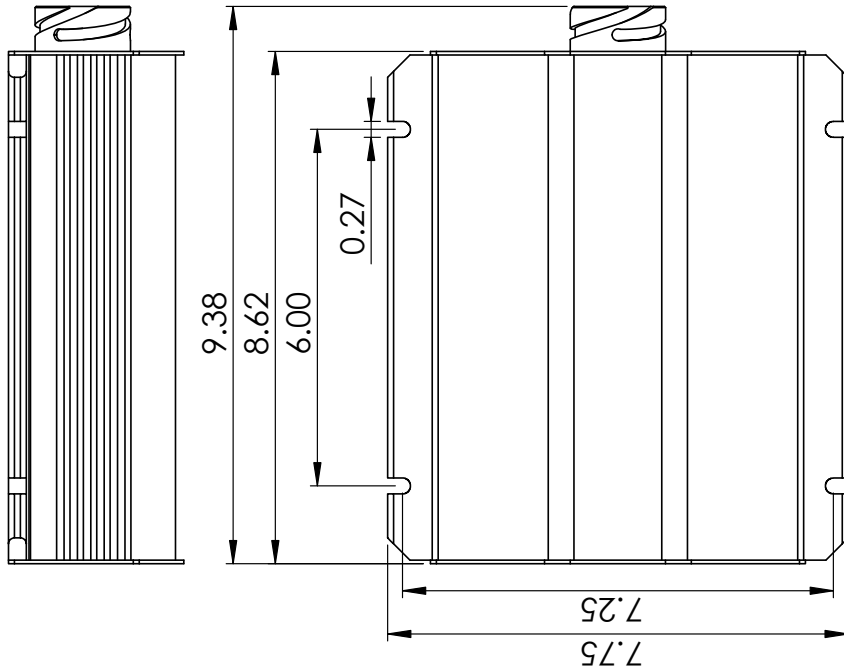
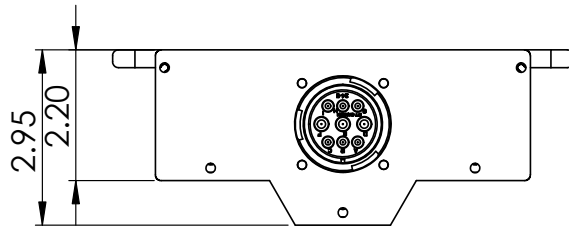
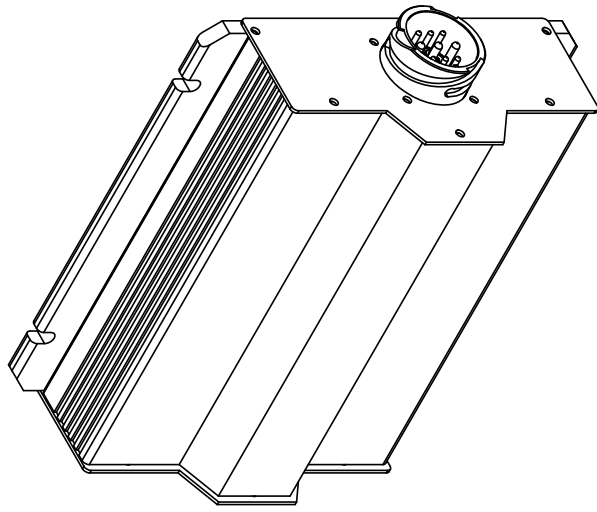
Design Features

- 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.		882 HS
INPUT	NOMINAL INPUT VOLTAGE RANGE	22 VDC to 60VDC
	MAXIMUM INPUT VOLTAGE RANGE	20 to 65 VDC
	INPUT CURRENT	9A @ 24 Vin with 15A @ 13.0 Vout
	INPUT CURRENT AT NO LOAD	< 150 mA over entire input/output voltage range
OUTPUT	OUTPUT VOLTAGE NOMINAL	13.6 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	11.8 VDC to 14.5 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	200 mV (without remote sensing) 30 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	500 W
	MAXIMUM LOAD CURRENT	30 ADC, for output voltage setting 12.0-14.0 VDC
PROTECTION	EFFICIENCY	Not less than 95% over entire operating range
	LOW INPUT VOLTAGE SHUTDOWN	< 10.5 +/-0.3 VDC
	HIGH INPUT VOLTAGE SHUTDOWN	> 61.0 VDC
	OVERLOAD SHUTDOWN	Knee current limit starting at 110% of maximum current
	ISOLATION	Ground (return) common to input and output
	OVER TEMPERATURE SHUTDOWN	Via internal thermostat, self resetting
CONNECTIONS	COOLING	By conduction through base plate and convection
	FUSING	Customer accessible by front panel removal
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector
	REMOTE TURN ON	Via pin to negative return 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
	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.)	7.0 / 3.2

NOTE: Specifications are subject to change without notice.

Rev 1/15/2020



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	SCALE: 1:3	WEIGHT:	SHEET 2 OF 2		
	5	4	3	2	1

Step-Down Sealed DC-DC Converter Non-Isolated



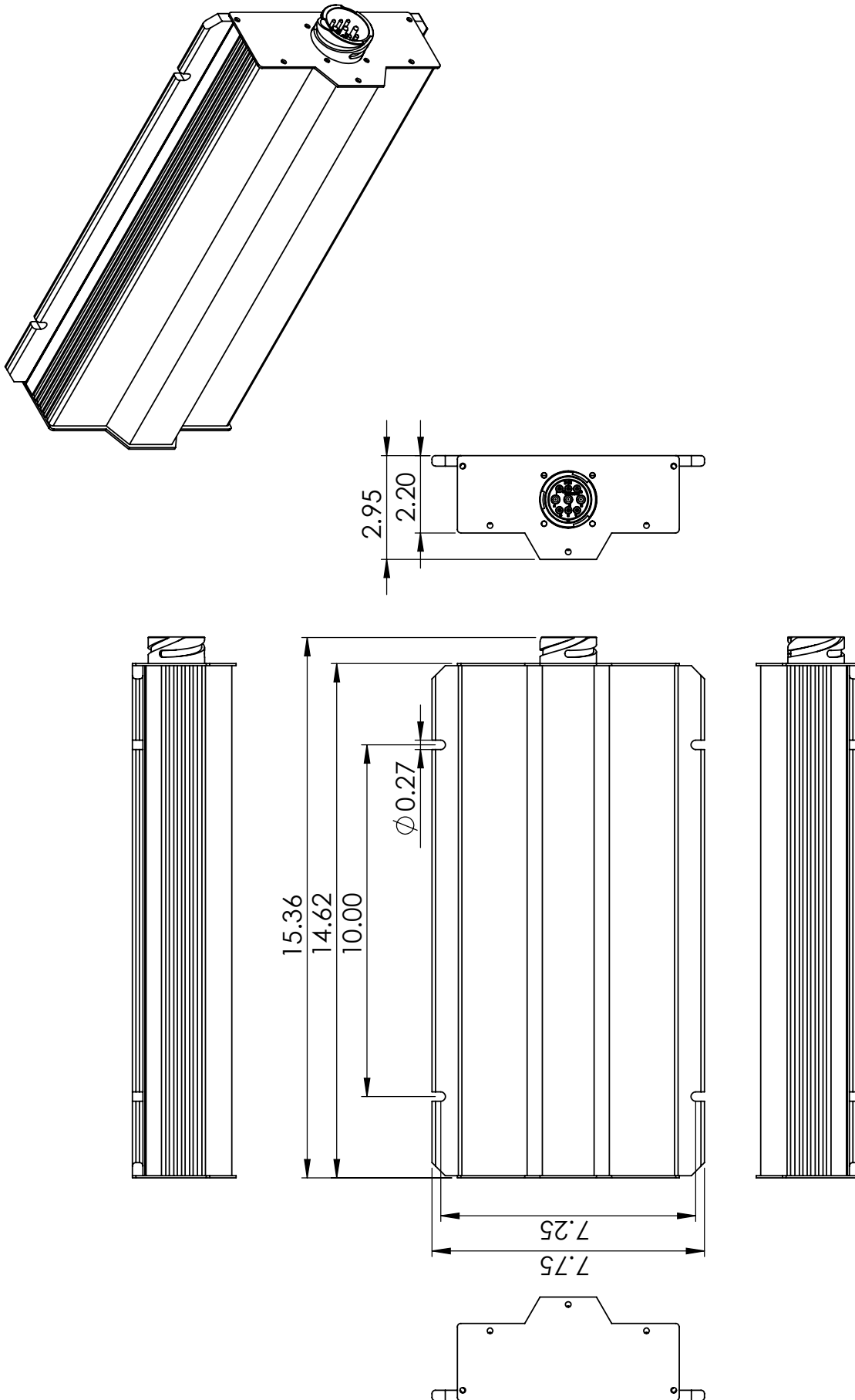
Design Features

- 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.		884 HS
INPUT	NOMINAL INPUT VOLTAGE RANGE	22 VDC to 60 VDC
	MAXIMUM INPUT VOLTAGE RANGE	20 to 61 VDC
	INPUT CURRENT WITH LOAD AT 55A; 13.6 Vout	32A measured with input at 24.0 V
	INPUT CURRENT AT NO LOAD	< 160 mA over entire input and output ranges
OUTPUT	OUTPUT VOLTAGE NOMINAL	13.6 VDC (factory adjusted)
	OUTPUT VOLTAGE ADJUSTMENT RANGE	11.8 VDC to 14.5 VDC (internally accessible to user)
	OUTPUT LOAD REGULATION	200 mV (without remote sensing)
		30 mV (with remote sensing)
	OUTPUT VOLTAGE REGULATION	< 0.2%
	OUTPUT RIPPLE	50 mV RMS at maximum load (measured at 25C)
	MAXIMUM CONTINUOUS OUTPUT POWER	850 W
	POWER SURGE	1000 W
PROTECTION	MAXIMUM LOAD CURRENT	60 ADC, for output voltage setting 12.0-14.0 VDC
	EFFICIENCY	Not less than 95% over entire operating range
	LOW INPUT VOLTAGE SHUTDOWN	< 10.5 +/-0.3 VDC
	HIGH INPUT VOLTAGE SHUTDOWN	> 61.0 VDC
	OVERLOAD SHUTDOWN	Knee current limit starting at 110% of maximum current
	ISOLATION	Ground (return) common to input and output
	OVER TEMPERATURE SHUTDOWN	Via internal thermostat, self resetting
CONNECTIONS	COOLING	By conduction through base plate and convection
	FUSING	Customer accessible by front panel removal
	INPUT/ OUTPUT CONNECTION	Via 9 pin Bayonet connector
GENERAL	REMOTE TURN ON	Via pin to -ve on input connector, may be disabled via internal jumper
	REMOTE SENSE	Via 2 pins on the output connector usage is optional
GENERAL	OPERATING TEMPERATURE RANGE	-40C to 70C, 100% loading
	OPERATING HUMIDITY	100% non condensing
	INGRESS RATING	IP 676
	MOUNTING SLOT CENTERS (in./cm.)	10.0 x 7.3 / 25.4 x 18.5
	DIMENSIONS, (in./cm.) (L x W x H)	15.5 x 8.0 x 2.9 / 39.4 x 20.3 x 7.4
	HOUSING MATERIAL	All Aluminum
WEIGHT, (lb./kg.)		12 /5.5

NOTE: Specifications are subject to change without notice.

Rev 10/15/2019



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	4	3	2	SCALE: 1:4	WEIGHT:
	5	1	1	SHEET 2 OF 2	

If you cannot find a model in this guide that suits your requirements, if you have questions, or would like engineering assistance, please contact us.

CONTACT US



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