

POWER

Intelligent VS Power

Up to 4920 Watts

Data Sheet

Total Power: Up to 4920 W
Input Voltage: 85 - 264 Vac
 380, 440 Vac
 120 - 300 Vdc
 1-Phase
 3-Phase
of Outputs: Up to 24



iVS™

PiMBus®
 Power Management. Defined.

SPECIAL FEATURES

- Full medical EN60601 approval
- Intelligent I²C control
- Voltage adjustment on all outputs (manual or I²C)
- Configurable input and output OK signals and indicators
- Configurable inhibit/enable
- Configurable output UP/DOWN sequencing
- High power density (12 W/cu-in)
- Intelligent fan (speed control/fault status)
- uP controlled PFC input with active Inrush protection
- I²C monitor of voltage, current, and temperature
- Programmable voltage, current limit, inhibit/enable through I²C
- Optional extended hold-up module (SEMI F47 compliance)
- Increased power density to 150%
- Optional conformal coating
- Industrial temp range (-40 °C to 70 °C)
- Uses standard iMP modules
- Field upgradeable firmware
- RoHS compliant

SAFETY

- UL UL60950/UL2601
- CSA CSA22.2 No. 234 Level 5
- UV EN60950/EN60601-1
- BABT Compliance to EN60950/EN60601 BS7002
- CB Certificate and report
- CE Mark to LVD

Electrical Specifications

| Input | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Input range | iVS1 & iVS3 90 - 264 Vac 1Ø; 120 - 300 Vdc |
| | iVS6 & iVS8 170 - 264 Vac 3Ø |
| | iVS8H 396 - 480 Vac rated at 4920 W DC output 3Ø 342 - 480 Vac rated at 4200 W DC output 3Ø |
| Frequency | 47 - 440 Hz |
| Inrush current | 40 A peak maximum (soft start) |
| Efficiency | Up to 85% @ full case load |
| Power Factor | 0.99 typ. meets EN61000-3-2 |
| Turn-on time | AC on 1.5 sec typical, inhibit/enable 150ms typical Programmable; 50 ms internal turn-on delay (Dual Output only) |
| EMI Filter | CISPR 22/EN55022 Level "B". Level "A" for iVS8H |
| Leakage current | 500 µA max. @ 240 Vac; 47-63 Hz |
| Radiated EMI | CISPR 22/EN55022 Level "B". Level "A" for iVS8H |
| Holdover storage | 10 ms minimum (independent of input Vac) additional 20 mSEC holdover storage with optional HUP module (SEMI F47 compatible) |
| AC OK | > 5 ms early warning minutes before outputs lose regulation Full cycle ride thru (50 Hz). Programmable |
| Harmonic distortion | Meets EN61000-3-2 |
| Isolation | Meets EN60950 and EN60601 |
| Global inhibit / enable | TTL, Logic "1" and Logic "0"; configurable |
| Warranty | 3 years |

* Note: iVS8H does not have Medical Approvals

Electrical Specifications

| Output | |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adjustment range* | ± 10% minimum all outputs (manual) (full module adjustment range using I ² C) |
| Factory set point accuracy | 1% |
| I ² C output program accuracy | ± 5% |
| Margining | ± 4 - 6% nominal analog (single output module only) |
| Overall regulation | 0.4% or 20 mV max. (1500 W modules 1% max.) |
| Ripple | RMS: 0.1% or 10 mV, whichever is greater Pk-Pk: 1.0% or 50 mV, whichever is greater Bandwidth limited to 20 MHz |
| Dynamic response | < 2% or 100 mV, with 25% load step |
| Recovery time | To within 1% in < 300 µsec |
| Overcurrent protection** | Configurable through I ² C (calibration required). Single output module and main output of the dual output module 105 - 120% of rated output current. Aux output of dual output module 105 - 140% of rated output current. Special programmable OCP delay on 1500 W module from 100 mSec to 25.5 seconds with shutdown features. |
| Short-circuit protection | Protected for continuous short-circuit. Recovery is automatic upon removal of short (Shutdown mode on 1500 W module). |
| Overvoltage protection* | Configurable through I ² C |
| | Single output module: 2 - 5.5 V 122 - 134%; 6 - 60 V 110 - 120% |
| | Dual output module: 2 - 6 V 122 - 134%; 8 - 28 V 110 - 120% |
| | Triple output module: 110 - 120% of highest voltage rating |
| Thermal protection* | Configurable through I ² C All outputs disabled when internal temp exceeds safe operating range. > 5 ms warning (AC OK signal) before shutdown |
| Remote sense | Up to 0.5 V total drop (not available on triple output module) |
| Single wire parallel | Current share to within 2% of total rated current |
| DC OK* | ± 5% of nominal. Configurable through I ² C |
| Minimum load | Not required |
| Housekeeping bias voltage | 5 Vdc @1.0 A max. present whenever AC input is applied Overall Regulation: ± 5% Ripple and Noise: 150 mV pk-pk, Bandwidth limited to 150 MHz and measured with 10 µF Tantalum capacitor and 0.1 µF ceramic capacitor in parallel on the output. |
| Module inhibit* | Configured and controlled through I ² C |
| Output/Output isolation | > 1 Megohm, 500 V |

* Can be controlled via I²C

** Controlled via I²C but requires load calibration (except 1500 W module)

Environmental Specifications

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------|
| Operating temperature | -40 ° to 70 °C ambient. Derate each output 2.5% per degree from 50 ° to 70 °C. (-20 °C start up) |
| Storage temperature | -40 °C to +85 °C |
| Electromagnetic susceptibility | Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3 |
| Humidity | Operating; non-condensing 10% to 95% RH |
| Vibration | IEC68-2-6 to the levels of IEC721-3-2 |
| MTTF field demonstrated | > 550,000 hours at full load, 220 Vac and 25 °C ambient conditions |

Output Module Line-up

| Module Code | 1 | 2 | 3 | 5 | 4 | — | |
|-------------------------------------------|----------|----------|----------|----------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----|
| Module Type | Single | Single | Single | Single | Dual | Triple | |
| Max output power | 210 W | 360 W | 750 W | 1500 W | 144 W | 36 W | |
| Max output current | 35 A | 60 A | 150 A | 300 A | 10 A | 2 A | |
| Output voltages available* | 2 - 60 V | 2 - 60 V | 2 - 60 V | 2 - 60 V | 8 - 15*, 24 - 28; 8 - 15*, 8 - 15*; 8 - 15*, 2 - 6; 2 - 6, 2 - 6; 24 - 28, 24 - 28; 24 - 28, 2 - 6 | 8 - 15, 8 - 15, 2 - 6; 8 - 15, 8 - 15, 8 - 15; 8 - 15, 8 - 15, 18 - 28; 8 - 15, 18 - 28, 2 - 6 | |
| Standard voltage increments | 25 | 25 | 25 | 25 | 16 | 18 | |
| Remote sense | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Remote margin | Yes | Yes | Yes | Yes | No | No | No |
| V-Program - I ² C Control | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Active Current Share | Yes | Yes | Yes | Yes | Yes | No | No |
| Module Inhibit - I ² C Control | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Module Inhibit - Analog | Yes | Yes | Yes | Yes | Yes | No | No |
| Overvoltage/Overcurrent protection | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Minimum load required | No | No | No | No | No | No | No |
| Slots occupied in any iVS case | 1 | 2 | 3 | 4 | 1 | 1 | |

* Note: Contact Factory for extended range down to 6 V

Internal Part Number Reference Table

| Part # | Where X = | Description | Module Code |
|--------------|------------------------------------|-----------------------|-------------|
| 73-558-XXXXi | 0005, 0006, 0012, 0024, 0048, 04XX | iVS/iMP 1500 W Module | 5A0 - 5Z0 |

Single



210 W



750 W

Dual



144 W

Triple



36 W



360 W



1500 W (2.0 - 8.0 V)



1500 W (10 - 60 V)



1500 W with Bus Bar Adaptor Option
(used with the 10 - 60 V module)

Output Module Voltage/Current*

| Voltage | Voltage Code | Single Output Module Code | | | | Dual Output*** | | Triple Output | | | I ² C Adjustment Ranges**** |
|------------------------|--------------|---------------------------|--------|--------|---------|----------------|-------|---------------|-------|-------|----------------------------------------|
| | | 1 | 2 | 3 | 5 | 4 | 4 | - | - | - | |
| 2 V | A | 35 A | 60 A | 150 A | 300 A | 10 A | 10 A | — | — | 2 A | 1.8 - 2.2 |
| 2.2 V | B | 35 A | 60 A | 150 A | 300 A | 10 A | 10 A | — | — | 2 A | 2.0 - 2.4 |
| 3 V | C | 35 A | 60 A | 150 A | 300 A | 10 A | 10 A | — | — | 2 A | 2.7 - 3.3 |
| 3.3 V | D | 35 A | 60 A | 150 A | 300 A | 10 A | 10 A | — | — | 2 A | 3.0 - 3.6 |
| 5 V | E | 35 A | 60 A | 150 A | 300 A | 10 A | 10 A | — | — | 2 A | 4.5 - 5.5 |
| 5.2 V | F | 35 A | 60 A | 144 A | 288 A | 10 A | 10 A | — | — | 2 A | 4.7 - 5.7 |
| 5.5 V | G | 34 A | 58 A | 136 A | 273 A | 10 A | 10 A | — | — | 2 A | 5.0 - 6.1 |
| 6.0 V | H | 23 A | 42 A | 97.5 A | 250 A | 10 A* | 10 A* | — | — | 2 A | 5.4 - 6.6 |
| 8.0 V | I | 20 A | 36 A | 84.4 A | 187.5 A | 10 A | 4 A | 1 A | 1 A | 1 A | 7.2 - 8.8 |
| 10 V | J | 18 A | 32 A | 75 A | 140 A | 10 A | 4 A | 1 A | 1 A | 1 A | 9.0 - 11.0 |
| 11 V | K | 17 A | 31 A | 68 A | 136.3 A | 10 A | 4 A | 1 A | 1 A | 1 A | 9.9 - 12.1 |
| 12 V | L | 17 A | 30 A | 62.5 A | 125 A | 10 A | 4 A | 1 A | 1 A | 1 A | 10.8 - 13.2 |
| 14 V | M | 14 A | 21 A | 53.5 A | 107 A | 9 A | 4 A | 1 A | 1 A | 1 A | 12.6 - 15.4 |
| 15 V | N | 14 A | 20 A | 50 A | 100 A | 8 A | 4 A | 1 A | 1 A | 1 A | 13.5 - 16.5 |
| 18 V | O | 11 A | 19 A | 41.6 A | 83.3 A | — | — | — | 0.5 A | 0.5 A | 16.2 - 19.8 |
| 20 V | P | 10.5 A | 18 A | 37.5 A | 75 A | — | — | — | 0.5 A | 0.5 A | 18.0 - 22.0 |
| 24 V | Q | 8.5 A | 15 A | 30 A | 62.5 A | 4 A | 2 A | — | 0.5 A | 0.5 A | 21.6 - 26.4 |
| 28 V | R | 6.7 A | 11 A | 26.8 A | 53.5 A | 3 A | 2 A | — | 0.5 A | 0.5 A | 25.2 - 30.8 |
| 30 V | S | 6.5 A | 11 A | 25 A | 50 A | — | — | — | — | — | 27.0 - 33.0 |
| 33 V | T | 6.2 A | 10.9 A | 22.7 A | 35.8 A | — | — | — | — | — | 29.7 - 36.3 |
| 36 V | U | 5.8 A | 10 A | 20.8 A | 35.8 A | — | — | — | — | — | 32.4 - 39.6 |
| 42 V | V | 4.2 A | 7.5 A | 16 A | 35.7 A | — | — | — | — | — | 37.8 - 46.2 |
| 48 V | W | 4.0 A | 7.5 A | 15.6 A | 31.2 A | — | — | — | — | — | 43.2 - 52.8 |
| 54 V | X | 3.7 A | 6.0 A | 13.9 A | 27.7 A | — | — | — | — | — | 48.6 - 59.4 |
| 60 V | Y | 3.5 A | 6.0 A | 12.5 A | 25 A | — | — | — | — | — | 54.0 - 66.0 |
| Contact Factory | | | | | | | | | | | |
| Special* | Z | 35 A | 60 A | 150 A | 300 A | — | 10 A | | | | 2.3 - 2.6 |
| Special* | Z | 35 A | 60 A | 150 A | 300 A | — | 10 A | | | | 3.7 - 4.4 |
| Special* | Z | 20 A | 36 A | 80 A | 140 A | — | 8 A | | | | 6.7 - 7.1 |

* Note: Contact Factory for extended range down to 6 V.

** Increments of current not shown can be achieved by paralleling modules (add currents of each module selected).

*** Total output power on dual model must not exceed 144 W.

**** For single output modules only.

Green reference lines indicate physical module groupings

Ordering Information

Sample below is 3210 W case with 12 V @ 125 A; 24 V @ 8.5 A; 5 V @ 60 A; 12 V @ 10 A and 12 V @ 4 A; with no options.

| Case Size | Module/Voltage/Option Codes | Case Option Codes | Software Code | Hardware Code |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------|
| iVS1 | 5L1 - 1Q1 - 2EO - 4LL0 | 00 | A | ### |
| <p>Case Size (mm)</p> <p>1-Phase Input</p> <p>1 = 5" x 5" x 11"; 1500 W - 3210 W, 9 Slots (127 x 127 x 279.4 mm)</p> <p>3 = 5" x 8" x 11"; 1800 W - 4500 W, 14 Slots (127 x 203.2 x 279.4 mm)</p> <p>3-Phase Input</p> <p>6 = 5" x 5" x 11"; 3120 W, 9 Slots (127 x 127 x 279.4 mm)</p> <p>8, 8H = 5" x 8" x 11"; 4920 W, 14 Slots (127 x 203.2 x 279.4 mm)</p> | <p>Module Codes:</p> <p>(None) = 36 W triple O/P (1 slot)</p> <p>1 = 210 W single O/P (1 slot)</p> <p>2 = 360 W single O/P (2 slot)</p> <p>3 = 750 W single O/P (3 slot)</p> <p>5 = 1500 W single O/P (slot 4)</p> <p>4 = 144 W dual O/P (1 slot)</p> <p>HUP = Extra 30mS hold-up (1 slot)</p> <p>Voltage Codes:</p> <p>See Output Module Voltage/Current table</p> <p>Option Codes:</p> <p>0 = Standard</p> <p>1 = Module enable</p> <p>2 = Constant current</p> <p>3 = 1 & 2 combined</p> <p>4 = Set for use in standard (non-intelligent case)</p> <p>5 = Shutdown mode for 1500 W</p> <p>6 = 1 & 5 combined</p> <p>7-9 Future</p> | <p>First Digit</p> <p>0 - 9, A - Z Parallel code (See parallel codes table below)</p> <p>Second Digit</p> <p>0 = No options</p> <p>1 = Reverse air</p> <p>2 = Not used</p> <p>3 = Global enable</p> <p>4 = Fan Idle w/inhibit</p> <p>5 = Opt 1 + Opt 3</p> <p>6 = Opt 1 + Opt 4</p> <p>7 = Opt 3 + Opt 4</p> <p>8 = Opt 1 + 3 + 4</p> <p>9 = RS485 73-544-001</p> <p>B = USB 73-546-001</p> <p>C = 9 + 3</p> <p>D = CANBUS 73-544-004</p> <p>E = D + 3</p> <p>F = RS485 - MODBUS 73-544-005</p> | <p>Software code used for configuration change. "A" is standard</p> | <p>Factory assembled for hardware of firmware mods.</p> |

Ordering Note:

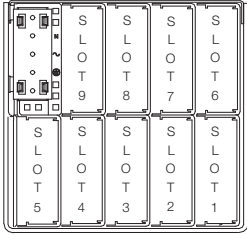
1. USB to I²C module order code 73-769-001

Ordering Information

| Parallel Code | Slot No. | iVS1, 6 | | iVS3, 8H | |
|---------------|---------------------------------------------------|---------|-----------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------|
| | | Diagram | Possible Configurations | Diagram | Possible Configurations |
| 1 | 1 & 2 | | 210 210; 210 144; 144 144 | | 210 210; 210 144; 144 144 |
| 2 | 2 & 3 | | 360 360; 360 210; 360 144; + above | | 360 360; 360 210; 360 144; + above |
| 3 | 3 & 4 | | 750 360; 750 210; 750 144; 210 210; 210 144; 144 144 | | 750 750; 750 360; 750 210; 750 144; 210 210; 210 144; 144 144 |
| 4 | 4 & 5 | | 1500 210; 1500 144; 210 210; 210 144; 144 144; 360 210; 360 144 | | 1500 1500; 1500 750; 1500 360; 1500 210; 1500 144; 210 210; 210 144; 144 144; 360 360; 360 210; 360 144 |
| 5 | 3, 4, & 5 | | 750 210 210; 750 210 144; 750 144 144 | | 750 210 210; 750 210 144; 750 144 144 |
| 6 | iVS1,6: 4 & 6 | | 1500 1500; 1500 750 | | |
| 7 | 4, 5, & 6 | | 1500 210 210; 1500 210 144; 1500 144 144; 1500 210 1500 | | 1500 210 210; 1500 210 144; 1500 144 144 |
| 8 | iVS1,6: 3 & 6 iVS3,8: 4, 5, & 9 | | 750 750 | | 1500 1500 1500; 1500 1500 750; 1500 1500 360; 1500 1500 210; 1500 1500 144 |
| 9 | iVS1,6: 1 & 6 iVS3, 8: 4, 5 & 9; 12 & 13 | | 1500 1500; 1500 360; 1500 144 | | 1500 1500 1500 360; 1500 1500 1500 210; 1500 1500 1500 144 |
| A | iVS1,6: 3 & 4; 8 & 9 iVS3, 8: 4 & 5; 11 & 12 | | 750 210 & 750 210 | | 1500 1500 & 750 750 |
| C | iVS1,6: 3, 4 & 6 iVS3, 8: 6 & 7; 3, 4, 11 & 12 | | 750, 360, 750 | | 750 750 360 750 750 |
| E | iVS1,6: 3, 4, 6; 8 & 9 iVS3, 8: 3, 4, 11, & 12 | | 750, 360, 750, 210 | | 750 750 750 750 |
| F | iVS1,6: 7-8 iVS3, 8: 3 & 4; 11 & 12 | | 360, 360 | | 750 360 & 750 210; 750 750 & 750 750 |
| G | iVS3, 8: 3,4 & 9 | | | | 750 750 750 |
| H | iVS3, 8: 11 & 12 | | | | 750 750 |
| J | iVS3, 8: 4 & 5; 9 & 10 | | | | 1500 210 & 210 1500 |
| K | iVS3, 8: 1 & 9; 5 & 12 | | | | 1500 750 & 1500 750 |
| L | iVS3, 8: 3 & 4; 7 & 8; 9 & 10 | | | | 750 210 & 750 210 & 210 1500 |
| M | iVS3, 8: 3, 4 & 9; 6 & 7 | | | | 750 750 360 750 |
| N | iVS3, 8: 4, 5 & 9; 12, 13 & 14 | | | | 1500, 1500, 1500, 210, 210 |
| P | iVS3, 8: 1 & 9 | | | | 1500, 750 |

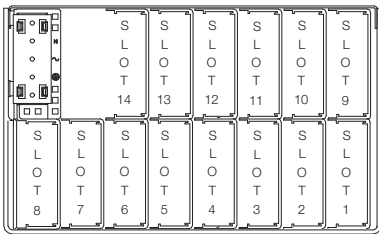
iVS Case Specifications

iVS1 and iVS6



| | | |
|--------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------|
| iVS1 = 5" x 5" x 11" (127 x 127 x 279.4 mm) 9 available slots | 90 - 264 Vac 1500 W max. | Input 170 - 264 Vac 3210 W max. |
| iVS6 = 5" x 5" x 11" (127 x 127 x 279.4 mm) 9 available slots 3-phase only | N/A | 170 - 264 Vac 3210 W max. |

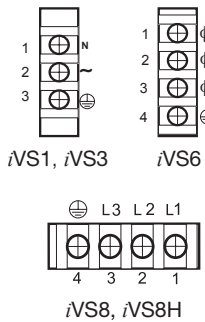
iVS3, iVS8 and iVS8H



| | | |
|--------------------------------------------------------------------------------|-----------------------------|---------------------------------------|
| iVS3 = 5" x 8" x 11" (127 x 203.2 x 279.4 mm) 14 available slots | 90 - 264 Vac 1800 W max. | Input 170 - 264 Vac 4500 W max. |
| iVS8 = 5" x 8" x 11" (127 x 203.2 x 279.4 mm) 14 available slots | 90 - 264 Vac 1800 W max. | 170 - 264 Vac 4920 W max. |
| iVS8H = 5" x 8" x 11" (127 x 203.2 x 279.4 mm) 14 available slots | 90 - 264 Vac 1800 W max. | 380 Vac 440 Vac 4920 W max. |

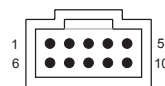
Pin Connectors

Figure 1. AC Input



| AC Input | Single Phase | 3 Phase |
|----------|------------------------|------------------------|
| Pin | Function | |
| 1 | AC neutral | Line 1 |
| 2 | AC line (hot) | Line 2 |
| 3 | Chassis (earth) ground | Line 3 |
| 4 | Not used | Chassis (earth) ground |

Figure 2. Connector J1

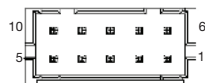


Mates with
Molex 90142-0010 Housing
90119-2110 Pin

Connector Kit Part No.:
70-841-004

| PFC Input Connector (control & signals) | |
|-----------------------------------------|------------------------------------------|
| Pin | Function |
| 1 | Input AC OK - "emitter" |
| 2 | Input AC OK - "collector" |
| 3 | Global DC OK - "emitter" |
| 4 | Global DC OK - "collector" |
| 5 | Spare |
| 6 | Global inhibit/optional enable logic "0" |
| 7 | Global inhibit/optional enable logic "1" |
| 8 | Global inhibit/optional enable return |
| 9 | +5 VSB housekeeping |
| 10 | +5 VSB housekeeping return |

Figure 3. Connector J2



Mates with
Landwin 2050S1000 Housing
2053T011V Pin

or

JST PHDR-10VS Housing
JST SPHD-002T-P0.5 (28-24)
JST SPHD-001T-P0.5 (26-22)

Connector Kit Part No.:
70-841-023

| I ² C Bus Output Connector | |
|---------------------------------------|--------------------------------|
| Pin | Function |
| 1 | No connection |
| 2 | No connection |
| 3 | No connection |
| 4 | Serial clock signal (SCL) |
| 5 | Serial data signal (SDA) |
| 6 | Address bit 0 (A0) |
| 7 | Address bit 1 (A1) |
| 8 | Address bit 2 (A2) |
| 9 | Secondary return (GND) |
| 10 | 5 VCC external bus (5 VCC bus) |

Mechanical Drawings

iMP Modules

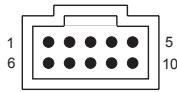
DC-DC Converter Output Modules

Control Signal Information, J1 Control Connector

| Pin No. | Function | |
|---------|-----------------------------|---------------------------|
| 1 | + Remote Sense | single or dual o/p main |
| 2 | Remote Margin / V. Program | single o/p |
| 3 | Margin High | single o/p |
| 4 | - Remote Sense / Margin Low | single or dual o/p main |
| 5 | Spare | |
| 6 | Module, Isolated Inhibit | single or dual o/p |
| 7 | Module Inhibit Return | single or dual o/p |
| 8 | Current Share (SWP) | single or dual o/p main |
| 9 | + Remote Sense V2 | dual o/p, single is spare |
| 10 | - Remote Sense V2 | dual o/p, single is spare |

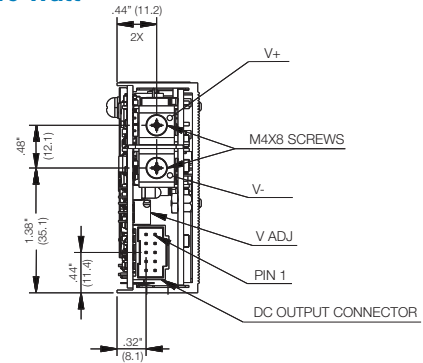
* Note: All iMP modules have a green DCOK LED. (except for 36 W module)

Figure 4. Connector J1

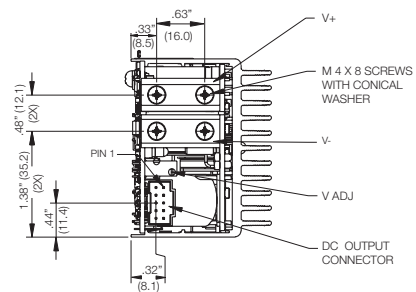


Mates with
Molex 90142-0010 Housing
90119-2110 Pin

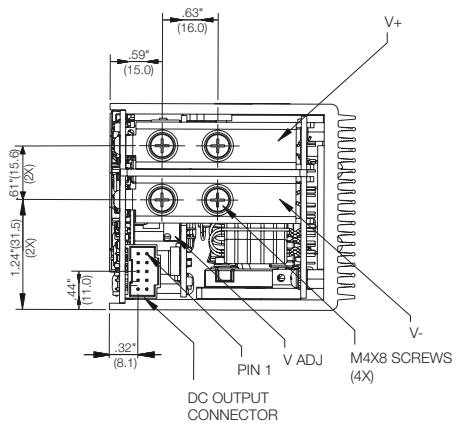
Single 210 Watt



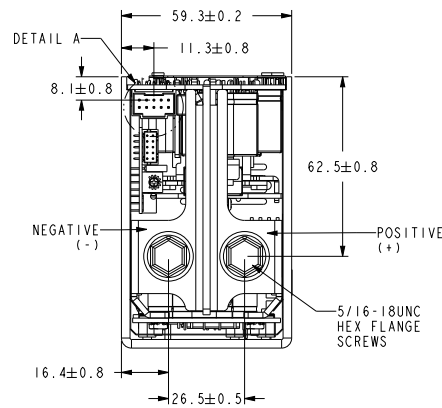
Single 360 Watt



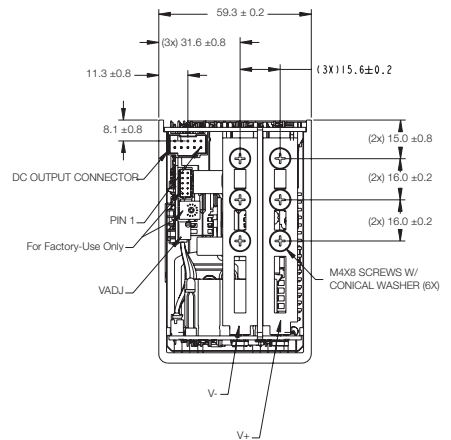
Single 750 Watt



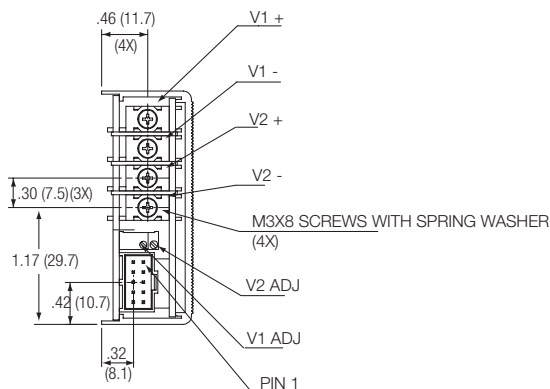
Single 1500 Watt 2-8 V



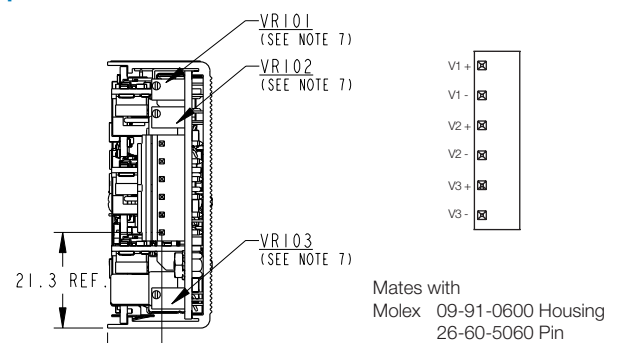
Single 1500 Watt 10-60 V



Dual 144 Watt



Triple 36 Watt

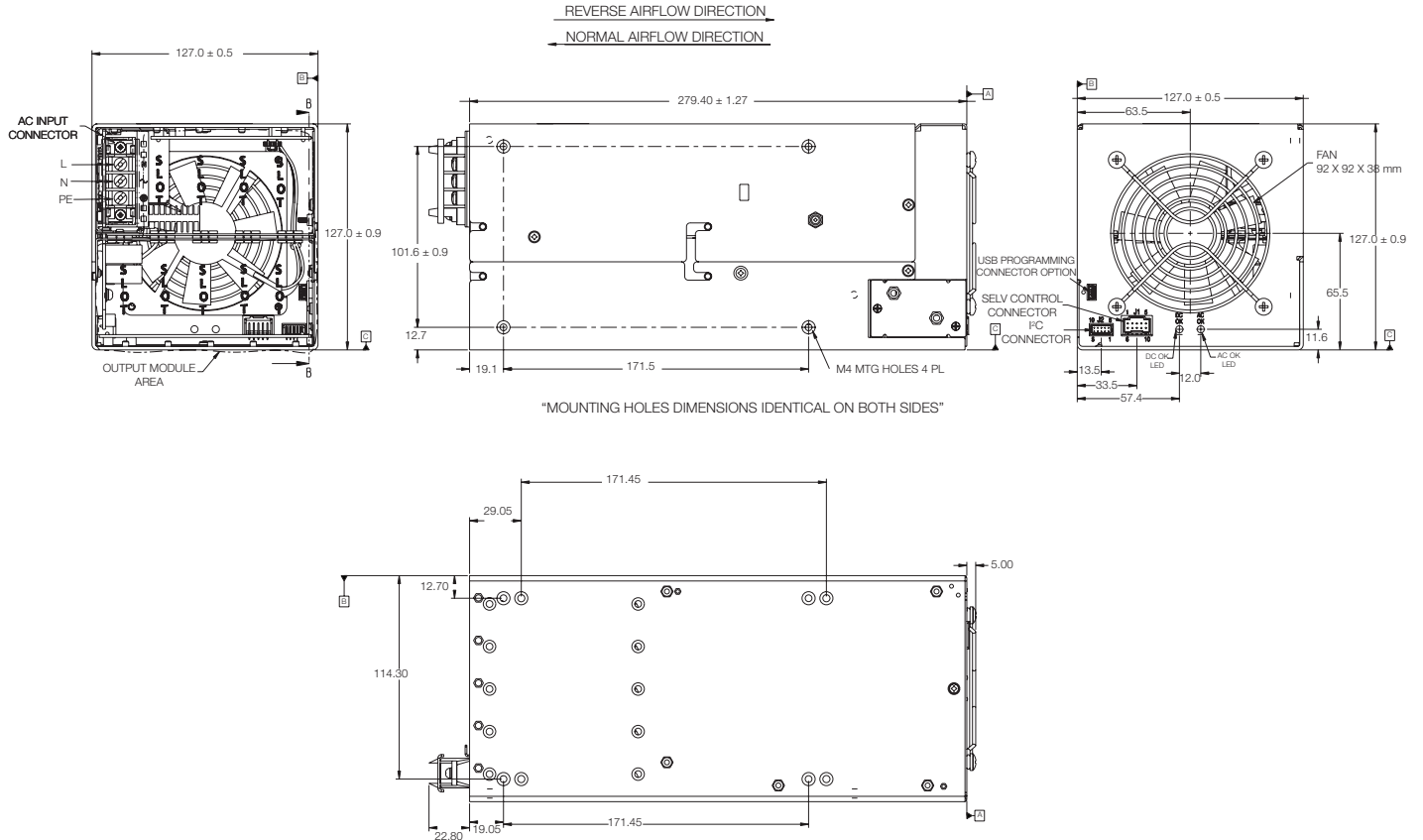


iVS Series

iVS1 (1500/3210 Watts Max)

5-Inch Case Size: iVS1: 5" x 5" x 11" (127 mm x 127 mm x 279.4 mm)

Weight: iVS1 Case: 6.2 lbs. • 1500 W Single: 2.0 lbs. • 750 W Single: 1.6 lbs.
 • 360 W Single: 1.0 lb. • 210 W Single: 0.6 lb. • 144 W Dual: 0.6 lb.



Notes:

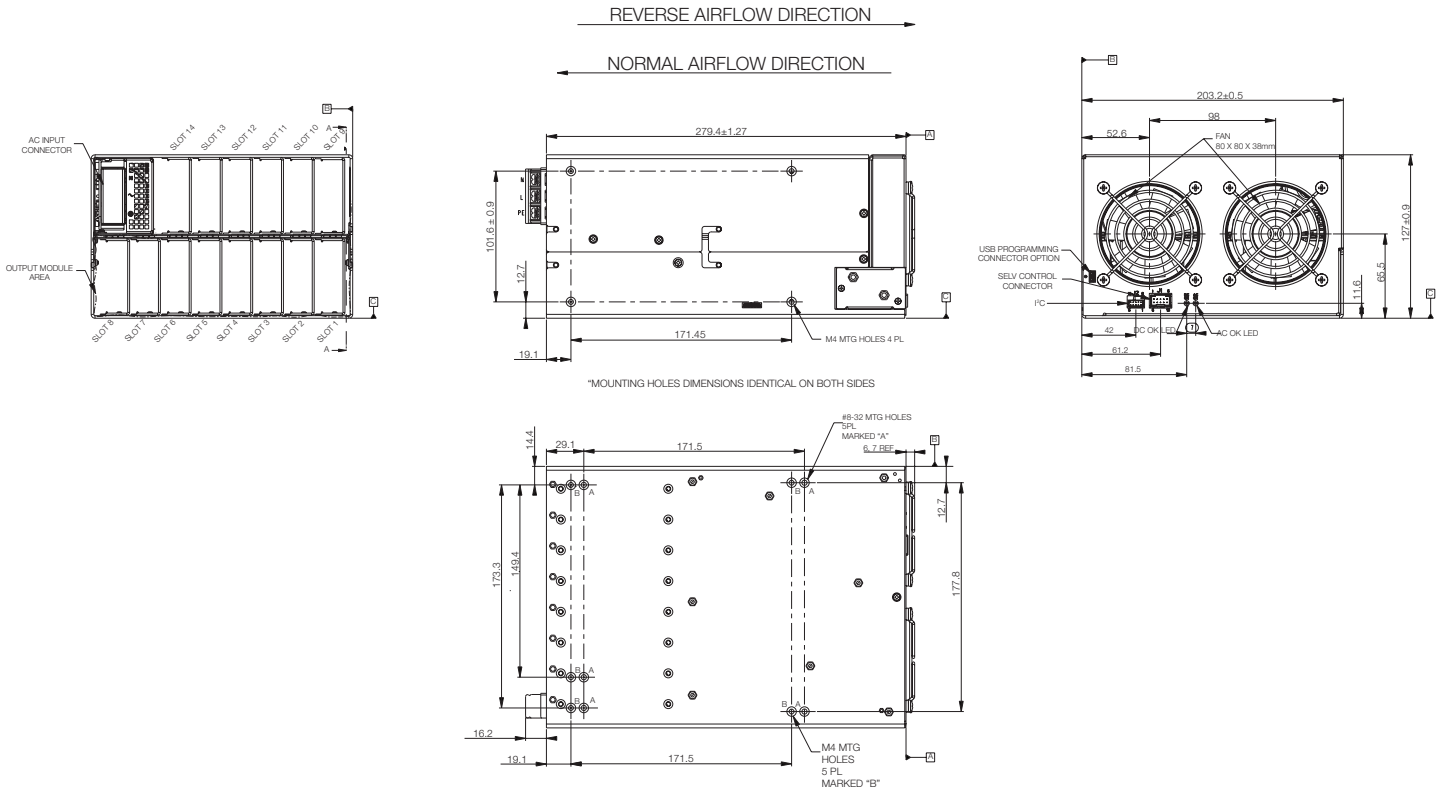
1. Input: Barrier type. Three No. 6-32 B.H. screws (0.375" centers). Max torque: 6 in-lbs. (0.67 N-m).
2. Control connectors: (J1) 10 position housing, gold plated contacts. Mates with Molex 90142-0010 housing with 90119-2110 crimp contacts (Molex C - Grid III Series). Connector kit includes mating connector and 10 pins, Astec part #70-841-004. (J2) 10 position housing (Landwin 2051P1000T). Mates with housing 2050S1000 (Landwin) with 2053T011P (Landwin) pins.
3. Chassis material: aluminum with chemical film coating (conductive).
4. All dimensions are in millimeters and inches, and are typical.
5. Customer mounting -3 sides M4, bottom also includes 8-32 mounting holes. Max. penetration is 0.155" (4.0 mm). Max. torque: 5 in-lbs. (0.57 N-m).
6. Output module connections: All single O/P modules are M4 x 8 mm screws. Max. torque: 10 in-lbs. (1.13 N-m). Dual O/P module is M3 x 8 mm screws. Max. torque: 5 in-lbs. (0.57 N-m).

iVS Series

iVS3 (1800/4500 Watts Max)

8-Inch Case Size: iVS3: 5" x 8" x 11" (127 mm x 203.2 mm x 279.4 mm)

Weight: iVS3 Case: 9.0 lbs. • 1500 W Single 2.0 lbs. • 750 W Single: 1.6 lbs.
 • 360 W Single: 1.0 lb. • 210 W Single: 0.6 lb. • 144 W Dual: 0.6 lb.



Notes:

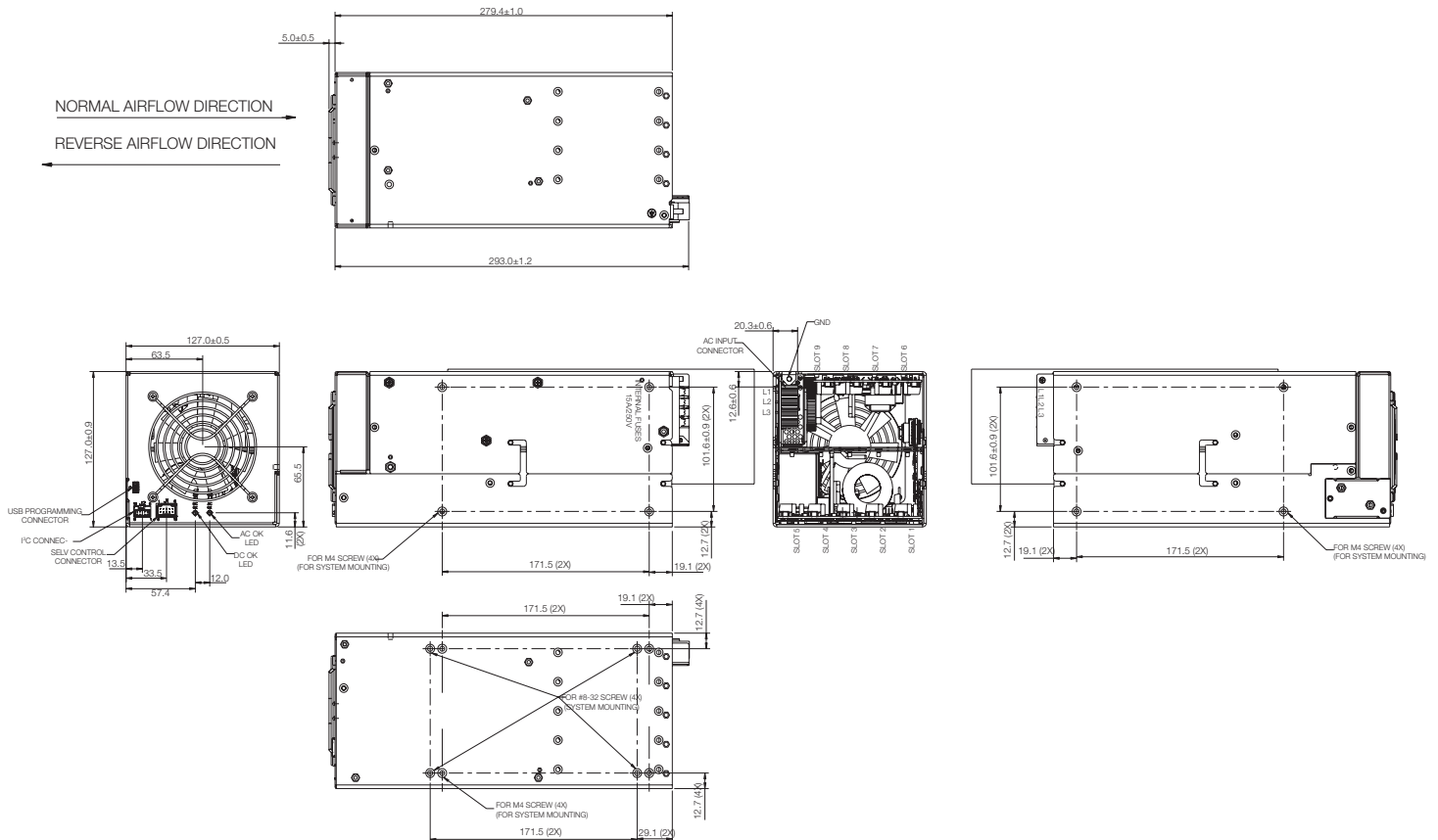
1. Input: Barrier type. Three M4 screws (0.512" centers). Max torque: 7 in-lbs. (0.79 N-m).
2. Control connectors: (J1) 10 position housing, gold plated contacts. Mates with Molex 90142-0010 housing with 90119-2110 crimp contacts (Molex C - Grid III Series). Connector kit includes mating connector and 10 pins, Astec part #70-841-004. (J2) 10 position housing (Landwin 2051P1000T). Mates with housing 2050S1000 (Landwin) with 2053T011P (Landwin) pins.
3. Chassis material: aluminum with chemical film coating (conductive).
4. All dimensions are in millimeters and inches, and are typical.
5. Customer mounting -3 sides M4, bottom also includes 8-32 mounting holes. Max. penetration is 0.155" (4.0 mm). Max. torque: 5 in-lbs. (0.57 N-m).
6. Output module connections: All single O/P modules are M4 x 8 mm screws. Max. torque: 10 in-lbs. (1.13 N-m). Dual O/P module is M3 x 8 mm screws. Max. torque: 5 in-lbs. (0.57 N-m).

iVS Series

iVS6 (3210 Watts Max)

5-Inch Case Size: iVS6: 5" x 5" x 11" (127 mm x 127 mm x 279.4 mm)

Weight: iVS6 Case: 6.0 lbs. • 1500 W Single 2.0 lbs. • 750 W Single: 1.6 lbs.
 • 360 W Single: 1.0 lb. • 210 W Single: 0.6 lb. • 144 W Dual: 0.6 lb.



Notes:

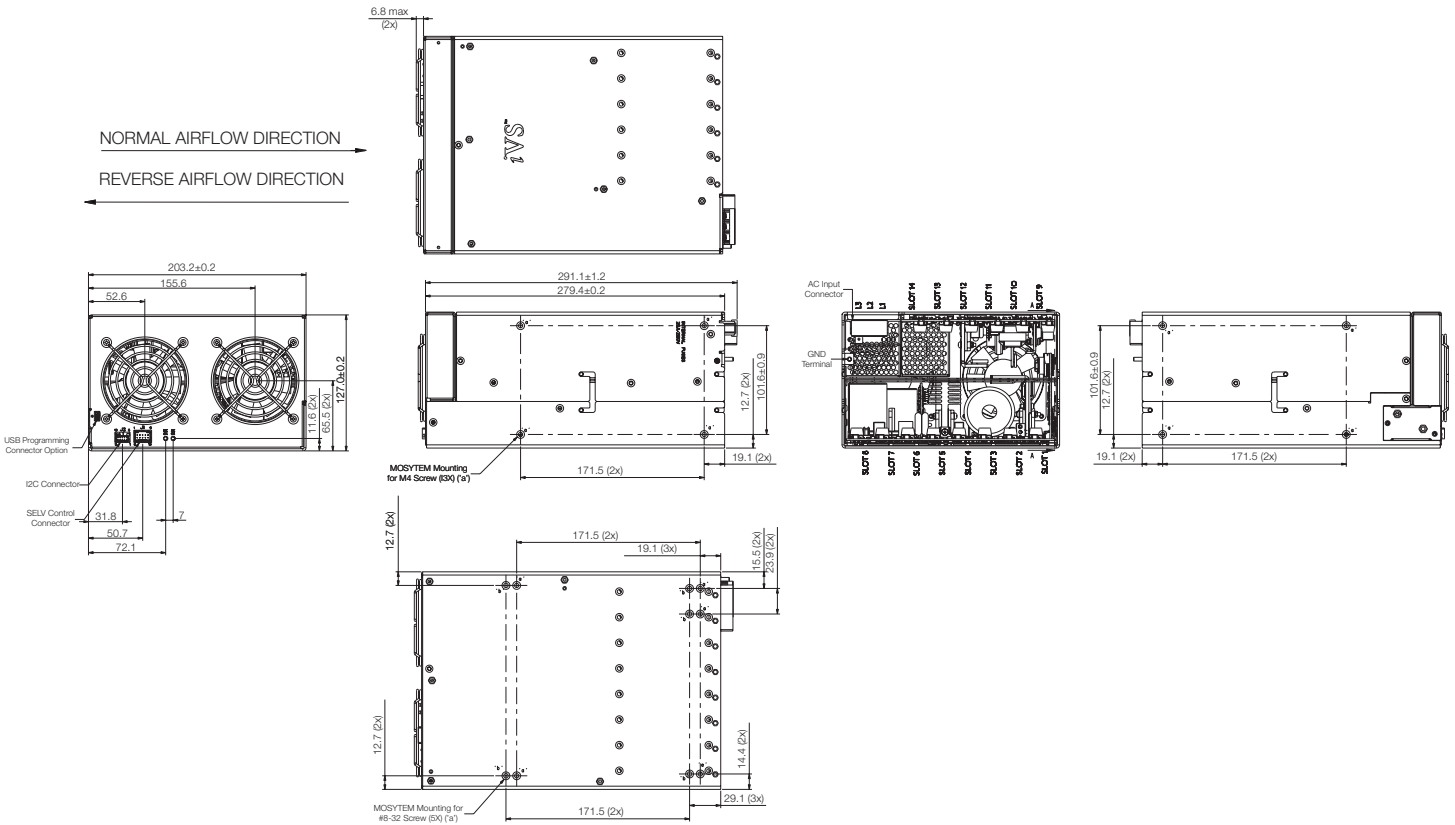
1. Input: Barrier type. Four M3 screws (0.325" centers). Max torque: 6 in-lbs. (0.67 N-m).
2. Control connectors: (J1) 10 position housing, gold plated contacts. Mates with Molex 90142-0010 housing with 90119-2110 crimp contacts (Molex C - Grid III Series). Connector kit includes mating connector and 10 pins, Astec part #70-841-004. (J2) 10 position housing (Landwin 2051P1000T). Mates with housing 2050S1000 (Landwin) with 2053T011P (Landwin) pins.
3. Chassis material: aluminum with chemical film coating (conductive).
4. All dimensions are in millimeters and inches, and are typical.
5. Customer mounting -3 sides M4, bottom also includes 8-32 mounting holes. Max. penetration is 0.155" (4.0 mm). Max. torque: 5 in-lbs. (0.57 N-m).
6. Output module connections: All single O/P modules are M4 x 8 mm screws. Max. torque: 10 in-lbs. (1.13 N-m). Dual O/P module is M3 x 8 mm screws. Max. torque: 5 in-lbs. (0.57 N-m).

iVS Series

iVS8 (4920 Watts Max)
iVS8H (4920 Watts Max)

8-Inch Case Size: iVS8: 5" x 8" x 11" (127 mm x 203.2 mm x 279.4 mm)

Weight: iVS8 Case: 9.0 lbs. • 1500 W Single 2.0 lbs. • 750 W Single: 1.6 lbs.
• 360 W Single: 1.0 lb. • 210 W Single: 0.6 lb. • 144 W Dual: 0.6 lb.



Notes:

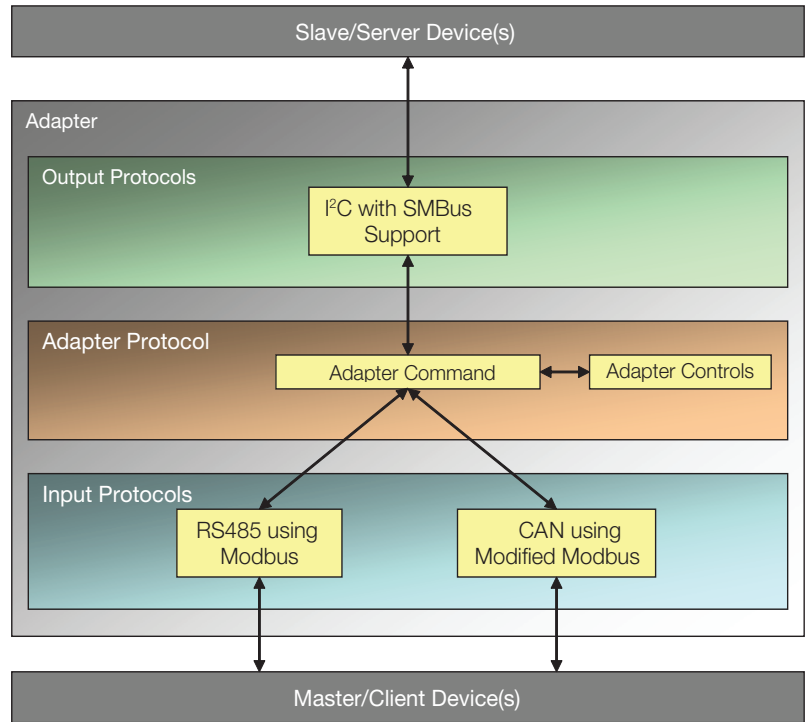
1. Input: Barrier type. Three M3.5 screws (0.394" centers). Max torque: 6 in-lbs. (0.67 N-m).
2. Control connectors: (J1) 10 position housing, gold plated contacts. Mates with Molex 90142-0010 housing with 90119-2110 crimp contacts (Molex C - Grid III Series). Connector kit includes mating connector and 10 pins, Astec part #70-841-004. (J2) 10 position housing (Landwin 2051P1000T). Mates with housing 2050S1000 (Landwin) with 2053T011P (Landwin) pins.
3. Chassis material: aluminum with chemical film coating (conductive).
4. All dimensions are in millimeters and inches, and are typical.
5. Customer mounting -3 sides M4, bottom also includes 8-32 mounting holes. Max. penetration is 0.155" (4.0 mm). Max. torque: 5 in-lbs. (0.57 N-m).
6. Output module connections: All single O/P modules are M4 x 8 mm screws. Max. torque: 10 in-lbs. (1.13 N-m). Dual O/P module is M3 x 8 mm screws. Max. torque: 5 in-lbs. (0.57 N-m).

Optional CANBUS or RS485 Interface

The RS485/CAN-to-I²C uses 2 Input Protocols and 1 Output Protocol.

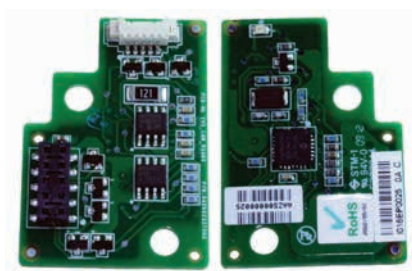
The Input Protocols used are RS485 using Modbus (Command Index: 0x01), and CAN using modified Modbus (Command Index: 0x02).

The Output Protocol use is: I²C with SMBus support (Command Index: 0x80).

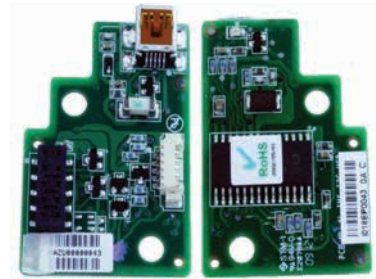


RS485/CAN - to - I²C

For detailed info, download the Software Requirements Specification (SRS) from <http://www.artesyn.com/power/power-supplies/category.php?catID=103>



iVS CAN RS485



iVS I²C USB

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