SINGLE PHASE WYE or HVDC INPUT 14.4 kW, 23~65 VDC OUTPUT

AC-DC POWER SHELVES SPSTET3-01 & SPSTET3-02

The SPSTET3-01 & SPSTET3-02 power shelf solution provides rectification, system management, and power distribution functions while maintaining high reliability and offering flexibility for future expansion.

The power shelf can be configured with up to four hot-swap capable TET3600-65-104xA series or TET3600-48-104xA series AC/DC-DC power modules that convert AC or AC/HVDC input to 23~65 VDC or 42~58 VDC output for powering IT racks, OCP racks and data centers.

The shelf has an option for a build-in Network Attached Controller, providing control functions and monitoring through a 10/100/1000 MB base Ethernet port. It can be connected directly to the data center management network.

FEATURES

- Four separate inputs, each input supports 1 power module
- Single phase or HVDC input
- Power modules are hot-swap capable
- Power shelf and power modules support CAN bus and Power Management bus communication for control, programming & monitoring
- The main output with programmable voltage of 23 ~ 65 VDC or 42 ~ 58 VDC, with a default output of 48V/54.5 V
- Parallel operation with active digital current sharing through CAN bus
- Power modules implement the following protections: over temperature, output over voltage & output over current
- Dimensions (L x W x H): 399 x 436 x 44.5 mm (16.29 x 17.17 x 1.75 in)

APPLICATIONS

- IT racks
- OCP racks
- Data centers

Please read our datasheet & drawing disclaimer here.

Downloaded from Arrow.com.

1. ORDERING INFORMATION

MODEL	AC INPUT	DC OUTPUT	CONTROLLER	INPUT CONNECTOR
SPSTET3-01	100 – 127 VAC or 200 – 240 VAC or 240 – 350 VDC	23 ~ 65 VDC or 42 ~ 58 VDC	No	IEC 60320 C22
SPSTET3-01N	100 – 127 VAC or 200 – 240 VAC or 240 – 350 VDC	23 ~ 65 VDC or 42 ~ 58 VDC	Yes	IEC 60320 C22
SPSTET3-02	100 – 127 VAC or 200 – 277 VAC or 240 – 380 VDC	23 ~ 65 VDC or 42 ~ 58 VDC	No	Anderson 2006G1
SPSTET3-02N	100 – 127 VAC or 200 – 277 VAC or 240 – 380 VDC	23 ~ 65 VDC or 42 ~ 58 VDC	Yes	Anderson 2006G1

NOTE: *The power shelf's default output voltage depends on the installed PSU model. For TET3600-48-104xA, the default output voltage is 54.5 VDC and can be set to 42 – 58 VDC. For TET3600-65-104xA, the output voltage is 48 VDC by default, with an adjustable range of 23 -65 VDC. The output voltage can be set within the range of 23 V ~ 65 V or 42 V ~ 58 V through CAN Bus, Power Management Bus or NAC.*

2. TECHNICAL DATA

PARAMETER	DESCRIPTION / CONDITION
Input	Single-Phase (100 – 127 VAC or 200 – 240 VAC) or HVDC input (240 – 350 VDC) – C22 AC inlet Single-Phase (100 – 127 VAC or 200 – 277 VAC) or HVDC input (240 – 380 VDC) – Anderson AC inlet
Inlet Configuration	4 Inlets
Redundant Configuration	4+0 / 3+1 / 2+2 configuration
Rated Output Power	14400 W [1]
Output Connection	SPSTET3-01 Power Shelf Output Connector for +23 ~ 65 VDC or +42 ~ 58 VDC output (Default output 48 V or 54.5 V)
Standby Output	30 W (Standby output 12 V / 2.5 A) [2] Protected by POLY-FUSE® Resettable PTC 5 A/16 V Trip Current 8.5 A /20 °C (serviceable)
Communication	CAN Bus and Power Management Bus
NAC Controller	Network Attached Controller (optional accessory)

[1] Max total power with 4 PSU on shelf, See TET3600-65-104xA or TET3600-48-104xA Datasheet.
[2] The Standby output rated power of a single TET3600-65-104xA or TET3600-48-104xA is 30 W.

3. SAFETY WARNING

Please refer to the installation instructions for detailed safety warnings.
The user assumes all responsibility and liability for proper and safe handling of the goods. Further, the user indemnifies Bel Power Solutions Inc. from all claims arising from the handling or use of the goods. Persons handling the product(s) must have electronics training and observe good engineering practice standards.

CAUTION:
Power shelf with installed PSU modules has high leakage current. Protective Earthing connection is essential.
Multiple power source. Disconnect all power cords before servicing.
Double pole/ neutral fusing. Disconnect mains before servicing.
Connect to earth, before connecting to supply.
Heavy Power Shelf equipped with PSUs, do not lift or move alone.

4. REFERENCE DOCUMENTS

DOCUMENT NUMBER	DESCRIPTION
BCD.20351	TET3600-65-104xA Datasheet
BCM.20173	TET3600-65-104xA Installation Instruction
BCA.20111	TET3600-65-104xA PMBus Communication Manual
BCD.00962	TET3600-48-104xA Datasheet
BCM.20060	TET3600-48-104xA Installation Instruction
BCA.G4002	TET3600-48-104xA PMBus Communication Manual
BCA.20093	Network Attached Controller Software Document
BCA.20094	SPSTET3-xx CAN Communication Manual
BCA.20095	SPSTET3-xx PMBus Communication Manual
BCM.20174	SPSTET3-01/02 Installation Instruction

Asia-Pacific
+86 755 2988 5888
EMEA
+353 61 531 820
North America
+1 866 513 2839
powersupport@belf.com
belfuse.com

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

5. OVERVIEW

The SPSTET3-0x Series is a 1RU heigh power shelf. It can be configured with up to four hot-swap capable TET3600-65-104xA Series or TET3600-48-104xA Series AC/DC-DC power modules that convert standard AC or HVDC input to DC output.
The power shelf and power module support CANBus and Power Management Bus communication for control, programming, and monitoring. The power shelf and power module are connected to the same CANBus interface. Refer to the respective CAN Communication Manual for additional information.
The power shelf with suffix "N" includes a Network Attached Controller (NAC) for providing control functions and monitoring through a 10/100/1000 MB base Ethernet port. It is supplied via the 12 V standby output of the power modules.
The NAC can be configured through a web interface; the monitoring and control functions are accessed through SNMPv3.

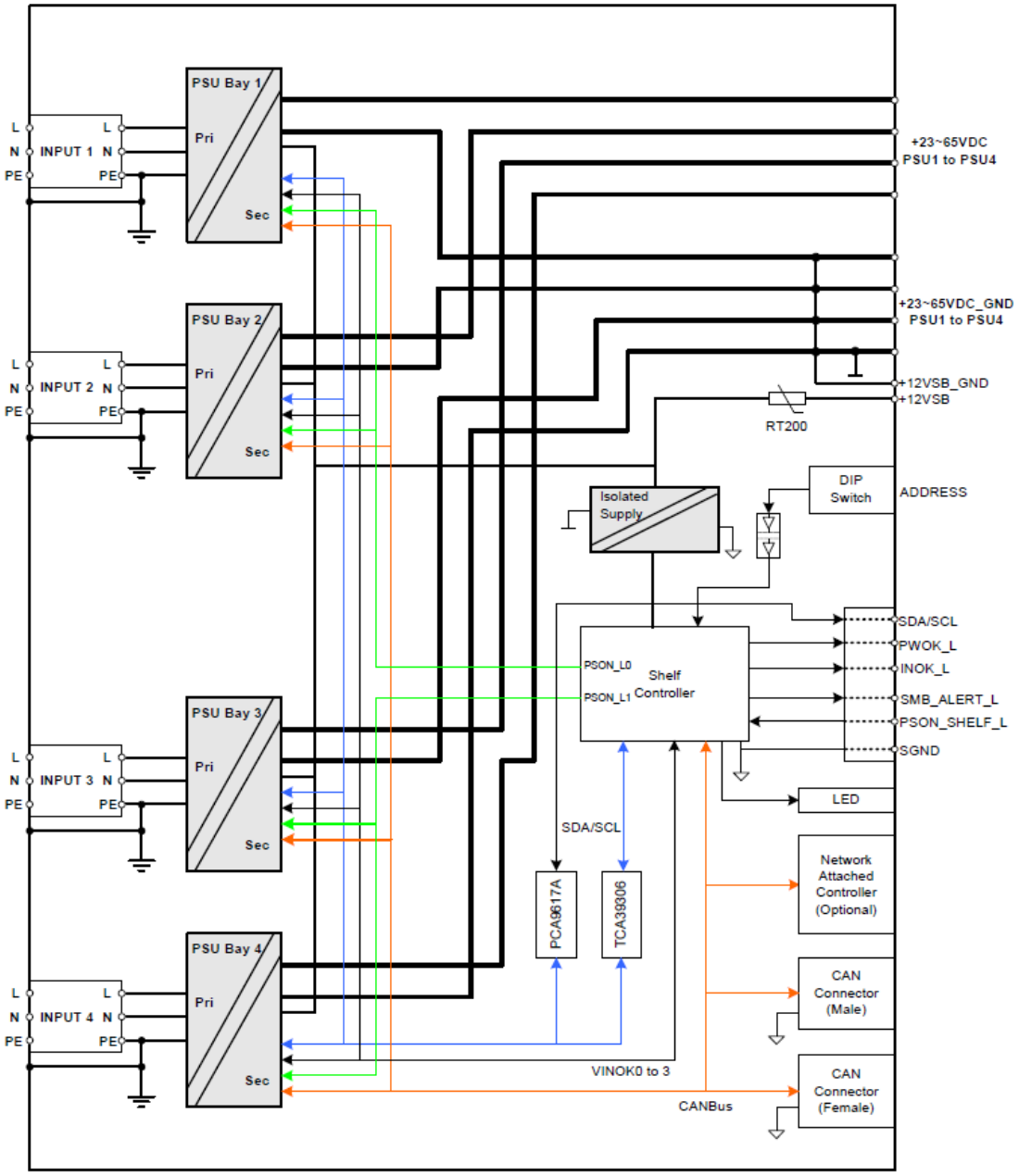


Figure 1. SPSTET3-01/SPSTET3-02 Block Diagram

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

6. INPUT SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
Input Connector					
AC Input Voltage Ranges	Single input	100	230	277	VAC
	HVDC input [1]	192	240~380	400	VDC
Max Input Current	per line			20	Arms
Input Frequency		47	50 / 60	63	Hz

7. OUTPUT SPECIFICATIONS

TET3600-65-104xA

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
Main Output V1 (Output Bus Bar)					
Nominal Output Voltage	When the PSU is installed in a shelf, the default output voltage at startup is 48 V. The output voltage can be configured via NAC, CANbus, or PMBus.	23	48	65	VDC
Total Regulation	Programmable PSU module	-3		+3	% Vout nom
Nominal Output Power	4+0 / 3+1 / 2+2 configuration, Ta ≤ 55°C, refer to Figure 2			14400	W
Nominal Output Current	4+0 / 3+1 / 2+2 configuration, Ta ≤ 55°C, refer to Figure 2			240	ADC
Available Output Power at V_i < 180 VAC	90 ≤Vi < 180 VAC, Ta ≤ 55°C, per power module			1500	W
Standby Output VSB (J206)					
Output Voltage	I_{SB} = 1.25 A, T_A = 25 °C		12		VDC
Voltage Regulation	Vi min to Vi max, 0 to 100 % ISB nom, $T_{A\,min}$ to $T_{A\,max}$	-5		+5	% Vout nom
Output Power				30	W
Output Current				2.5	ADC

TET3600-48-104xA

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
Main Output V1 (Output Bus Bar)					
Nominal Output Voltage	When the PSU is installed in a shelf, the default output voltage at startup is 54.5 V. The output voltage can be configured via NAC, CANbus, or PMBus.	42	54.5	58	VDC
Total Regulation	Programmable PSU module	-3		+3	% Vout nom
Nominal Output Power	4+0 / 3+1 / 2+2 configuration, Ta ≤ 50°C, Refer to the TET3600-48-104xA datasheet			14400	W
Nominal Output Current	4+0 / 3+1 / 2+2 configuration, Ta ≤ 50°C, Refer to the TET3600-48-104xA datasheet			300	ADC
Available Output Power at V_i < 180 VAC	90 ≤Vi < 180 VAC, Ta ≤ 50°C, V1 ≥ 48.0 V per power module		21Arms*Vin – 400W[2]		W
Standby Output VSB (J206)					
Output Voltage	I_{SB} = 1.25 A, T_A = 25 °C		12		VDC
Voltage Regulation	Vi min to Vi max, 0 to 100 % ISB nom, $T_{A\,min}$ to $T_{A\,max}$	-5		+5	% Vout nom
Output Power				30	W
Output Current				2.5	ADC

[1] HVDC input is available only on the TET3600-48-104xA series PSU.
[2] Example: At the nominal 120 Vac input, the max output power is 2120 W, and can be maintained with input voltage fluctuations of -10% (108 VAC).

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

7.1. PROTECTION (PER MODULE)

TET3600-65-104xA

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
Input Fuses (L+N)	Fast-acting 30 A input fuses (6.3 × 32 mm) in series with both the L- and N-line inside the power supply protect against severe defects.		30		A
OV Threshold V1	Hardware protection	70	74	78	VDC
OV Latch Off Time V1				1	ms
Nominal Power Limitation	Vin > 180 VAC, Ta ≤ 55°C, V1 = 65 VDC, refer to Figure 2	3700	3800		W
	Vin > 180 VAC, Ta ≤ 55°C, V1 = 54.5 VDC, refer to Figure 2	3100	3200		W
Nominal Current Limitation	Vin > 180 VAC, Ta ≤ 55°C, V1 = 65 VDC Vin > 180 VAC, Ta ≤ 55°C, V1 = 54.5 VDC		59 64		A A
Power Limit Blanking Time	Time until power limit is reduced to nominal value	10			ms
Max Short Circuit Current V1	V1 < 10 VDC, excluding output capacitor discharging current			75	A
Short Circuit Latch Off Time	Time to latch off when in short circuit or output under voltage (V1 < V1 UV)		10		ms
Output Under Voltage Protection	V1 UV	20	21	22	VDC
Output Under Voltage Protection Delay Time V1	V1 < V1 UV		250		ms
Over Temperature on Critical Points	Inlet Ambient Temperature PFC Primary Heatsink Temperature DC/DC Primary Heatsink Temperature Secondary Sync Mosfet Temperature		75 105 105 120		°C
OV Threshold Vsb	Output under voltage protection standby	13.0	13.6	14.5	VDC
UV Threshold Vsb	Output under voltage protection standby	11.1	11.2	11.3	VDC
Current Limitation Vsb	Standby over current limit	3	3.2		A

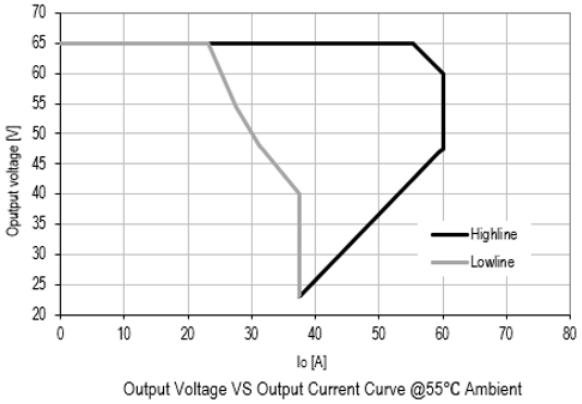


Figure 2. CCM output characteristics V1

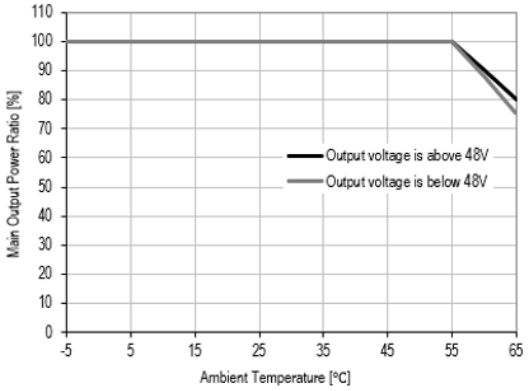


Figure 3. Derating on V1 vs Ta

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

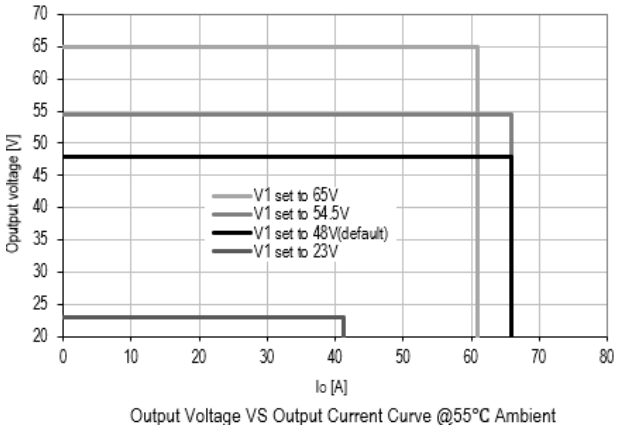


Figure 4. CVM output characteristics V1(Highline)

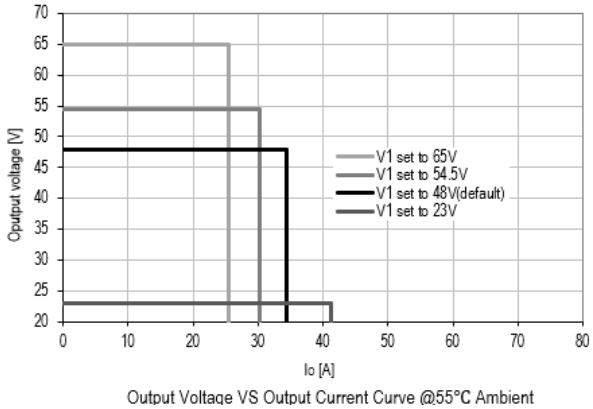


Figure 5. CVM output characteristics V1(Lowline)

TET3600-48-104xA

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
Input Fuses (L+N)	Fast-acting 30 A input fuses (6.3 × 32 mm) in series with both the L- and N-line inside the power supply protect against severe defects.		30		A
OV Threshold V1	Hardware protection	110		120	% V1 nom
OV Latch Off Time V1				1	ms
Nominal Power Limitation	Vin > 180 VAC, Ta ≤ 50°C, V1 ≥ 48 V Refer to the TET3600-48-104xA datasheet	3700	3800		W
Nominal Current Limitation	Vin > 180 VAC, Ta ≤ 50°C, V1 = 54.5 VDC Refer to the TET3600-48-104xA datasheet	69	72	75	A
Power Limit Blanking Time	Time until power limit is reduced to nominal value	10			ms
Max Short Circuit Current V1	V1 < 10 VDC, excluding output capacitor discharging current		76		A
Short Circuit Latch Off Time	Time to latch off when in short circuit or output under voltage (V1 < V1 UV)		10		ms
Output Under Voltage Protection	V1 UV	39	40	41	VDC
Output Under Voltage Protection Delay Time V1	V1 < V1 UV		250		ms
Over Temperature on Critical Points	Inlet Ambient Temperature PFC Primary Heatsink Temperature DC/DC Primary Heatsink Temperature Secondary Sync Mosfet Temperature		75 105 105 120		°C
OV Threshold Vsb	Output under voltage protection standby	13.0		14.5	VDC
UV Threshold Vsb	Output under voltage protection standby	11.1	11.2	11.3	VDC
Current Limitation Vsb	Standby over current limit	3	3.2		A

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

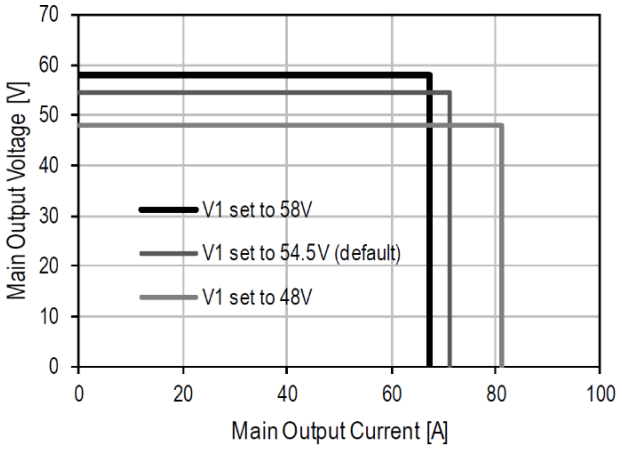


Figure 6. Output characteristics V_1

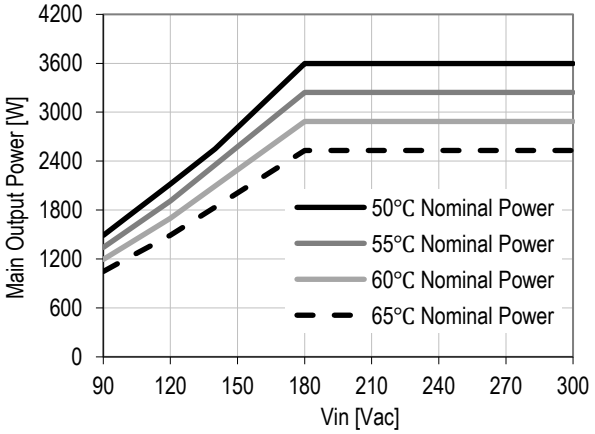


Figure 7. Derating on V1 vs Ta & Vin

7.2. MAIN OUTPUT CONNECTOR

The default main output of SPSTET3-0x series depends on the PSU used. If TET3600-65-104xA is inserted, the default main output voltage is 48V, while the main output voltage of shelf is 54.5V if TET3600-48-104xA is inserted.
The output voltage can be set within the range of 23 V~65 V or 42 V~58 V through CANBus, Power Management Bus or NAC.

The default positive output is separated for the 4x power supplies in one shelf, if power supplies need to be used at stand-alone mode, current share between power supplies should be disabled via CANBus as current share is implemented by CAN communication, please refer to CAN communication manual for more details. If any of the power supplies need to be used in parallel operation mode, optional busbar (see section 15) could be used to connect 2 or 3 or 4 power supplies together.

PIN OUTS (V_1)	FUNCTION	DESCRIPTION
1+, 2+, 3+, 4+	Main output	+23 ~ 65 V or +42 ~ 58 V output
1-, 2-, 3-, 4-	Main output _GND	+23 ~ 65 V or +42 ~ 58 V return

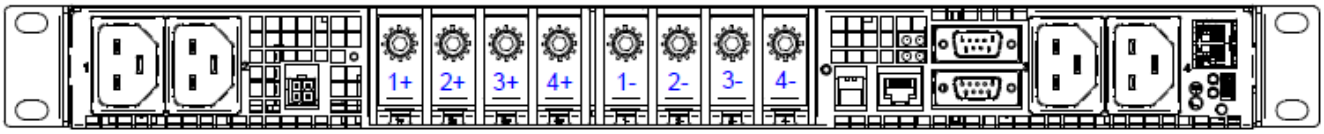


Figure 8. Main Output Connector V1 of SPSTET3-01N

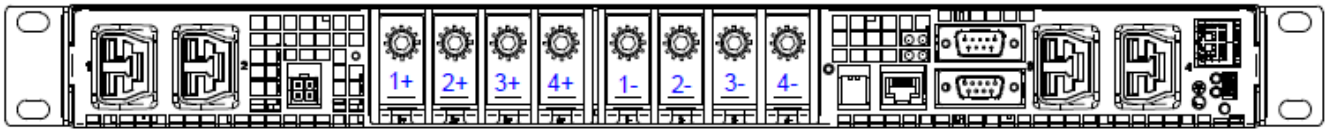


Figure 9. Main Output Connector V1 of SPSTET3-02N

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

7.3. +12 Vsb CONNECTOR

The Standby output rated power of a single TET3600-65-104xA or TET3600-48-104xA is 30 W (12 V/2.5 A).
Protected by POLY-FUSE® Resettable PTC 5 A/16 V Trip Current 8.5 A /20 °C (serviceable)

PIN OUTS (J206)	FUNCTION	DESCRIPTION
1, 3	V_{sb}_GND	+12 V_{sb} return
2, 4	V_{sb}	+12 V_{sb} output

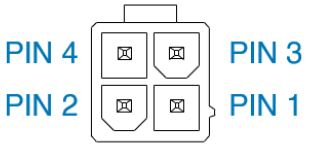


Figure 10. +12 Vsb Connector

7.4. LOGIC SIGNALS

J207 PINOUT

PIN	FUNCTION	DESCRIPTION
1	DNC	Do Not Connect
2	VINOK_L	INOK signal: active-low
3	PSON_SHELF_L	Power shelf on input: active-low
4	SGND	Signal ground
5	SDA	PMBus SDA signal
6	SCL	PMBus SCL signal
7	SMB_ALERT_L	SMB Alert signal output: active-low
8	PWOK_L	Power OK signal: active-low

Figure 11. Signal Connector Pin Out (8P8C Modular Jack)

MAXIMUM RATINGS

SYMBOL	DESCRIPTION	MIN	NOM	MAX	UNIT
$V_{I/O}$	I/O Voltage	0		24	V
$I_{I/OL}$	I/O Sink Current			20	mA

I/O CHARACTERISTICS

SYMBOL	DESCRIPTION	MIN	NOM	MAX	UNIT
V_{IL}	High-level input voltage	1.5			V
V_{IH}	Low-level input voltage			0.8	V
V_{OL}	High-level output voltage		3.1[3]		V
V_{OH}	Low-level output voltage, @ 10 mA Sink Current	0.2			V
V_{OH}	Low-level output voltage, @ 20 mA Sink Current	0.4			V

[3] Without external pull-up.

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

SHELF I/O CIRCUITRY

All I/O are implemented as open collector with a weak pull-up. The I/O are internally pulled up to 3.3 V via a 10 kΩ resistor. The schematic drawing represents the internal circuit of the shelf.
External pullup resistors to higher voltages may be added. When selecting external pullups, please consider the maximum ratings.

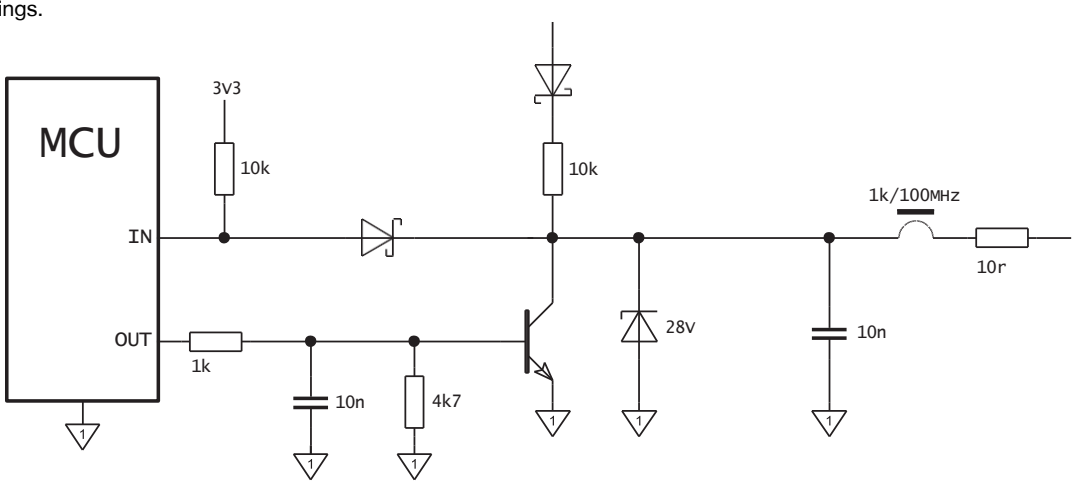


Figure 12. I/O Circuitry

8. COMMUNICATION

Communication to the power shelf and the power modules is via CAN Bus or PMBus. The power modules also use CAN Bus for its active current-share function. For further information please refer to the CAN or Power Management Bus Communication Manual documents (BCA.20094 and BCA.20095).

8.1. J205 CONNECTOR PINOUT

D-Sub 9 PIN OUTS (J205)	FUNCTION	DESCRIPTION
1	NC	NC
2	CAN_L	Dominant Low
3	CAN_GROUND	Ground
4	NC	NC
5	CAN_SHIELD	Shield, Optional
6	CAN_GROUND	Ground, Optional
7	CAN_H	Dominant High
8	NC	NC
9	NC	NC

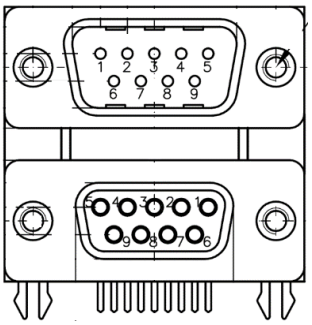


Figure 13. J205 Pinout

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

8.2. ADDRESSING

All PSUs are individually addressable. Each individual address is a result of the PSU slot number combined with the shelf address. The PSU and Backplane addresses are configurable via DIP Switch.

DIP Switch		CAN Node-ID				
POSITION 1	POSITION 2	PSU1	PSU2	PSU3	PSU4	Backplane
ON	ON	0x01	0x02	0x03	0x04	0x1F
ON	OFF	0x05	0x06	0x07	0x08	0x2F
OFF	ON	0x09	0x0A	0x0B	0x0C	0x3F
OFF	OFF	0x0D	0x0E	0x0F	0x10	0x4F

DIP Switch		I2C Address				
POSITION 1	POSITION 2	PSU1	PSU2	PSU3	PSU4	Backplane
ON	ON	0xB0	0xB2	0xB4	0xB6	0x26
ON	OFF	0xB8	0xBA	0xBC	0xBE	0x28
OFF	ON	0xC0	0xC2	0xC4	0xC6	0x2A
OFF	OFF	0xC8	0xCA	0xCC	0xCE	0x2C

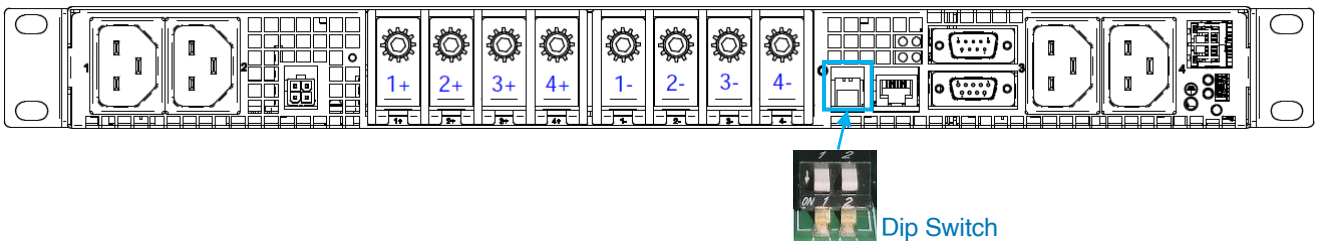


Figure 14. DIP Switch Connector for SPSTET3-01&SPSTET3-01N (Rear view)

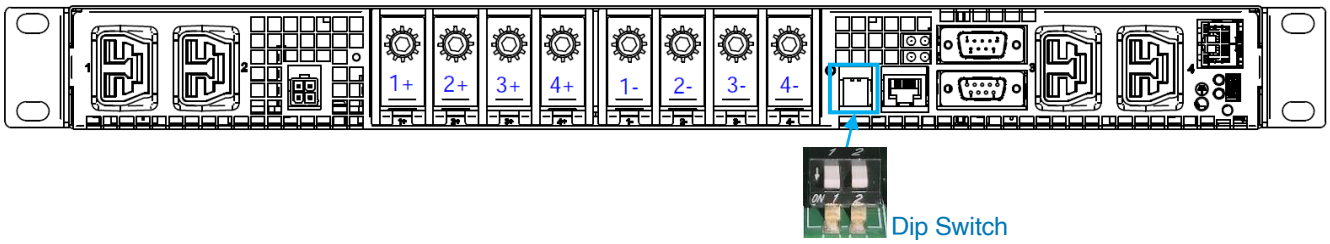


Figure 15. DIP Switch Connector for SPSTET3-02&SPSTET3-02N (Rear view)

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

8.3. NETWORK ATTACHED CONTROLLER (OPTIONAL)

The Network Attached Controller is a shelf level controller providing monitoring and control functions through a 10/100/1000 MB base Ethernet port and can be connected directly to the data center management network. It is embedded (not hot-pluggable) in power shelf and supplied via the 12 V standby output of the power modules. The controller can be configured through a web interface; the monitoring and control functions are accessed through SNMP.

See BCA.20093 for Network Attached Controller Software Documentation.

8.3.1. LAN PORT: RJ45

The LAN should be connected to the RJ45 connector of the NAC. The Ethernet port is galvanically isolated from the PSU output and is connected to a 10Base-T/100Base-TX/1000Base-T physical-layer transceiver for transmission and reception of data over standard CAT-5 unshielded twisted pair (UTP) cables. The built-in HP Auto MDI/MDI-X function allows to reliably detect and auto correct straight-through and crossover cable connections. The transceiver will automatically negotiate and select the highest link-up speed (10/100/1000Mbps) and duplex (half/full) configuration.

Once the interface has received an IP address on the network, the yellow LED on the controller is disabled. On the RJ45 connector, only the green LED is active and lights up when there is traffic activity on the network.

8.3.2. NAC LEDS / BUTTON

OK LED green blinking 0.9/0.1 sec: normal operation; green blinking 0.1/0.1 sec: initiating factory reset; off: initiating cold start.

IP LED orange blinking 0.3/0.7 sec: received IPv4 address, no IPv6 address; blinking 0.7/0.3 sec: received IPv6 address, no IPv4 address; on: no IP address; off: received IPv4 and IPv6 address.

RST button pressing < 1 sec: no function**;** pressing > 1 sec: if released, a cold start will be initiated. pressing > 7 sec: if released, a factory reset is being initiated.

9. PARALLEL OPERATION

Up to 4 SPSTET3-0x power-shelves can be configured for parallel operation:

- Connect the following:
  - o V1 Main Output
  - o VSB Standby Output
  - o CANBus
- NAC
  - o Per power-zone, install only 1 NAC.
  - o If a NAC is used, then install it either on the top-shelf or the bottom-shelf.
  - o If a NAC is installed, a CAN Terminator on that shelf is not required. The NAC has termination assembled internally.
- CAN Bus connection and termination
  - o Use CAN Bus Cables (see Accessories) to connect the CAN ports between shelves.
  - o Connect a CAN Terminator (see Accessories) to the top-shelf and bottom-shelf.

  If a NAC is installed, a CAN Terminator on that shelf is not required.
- Set the power-shelf address via the DIP Switches

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

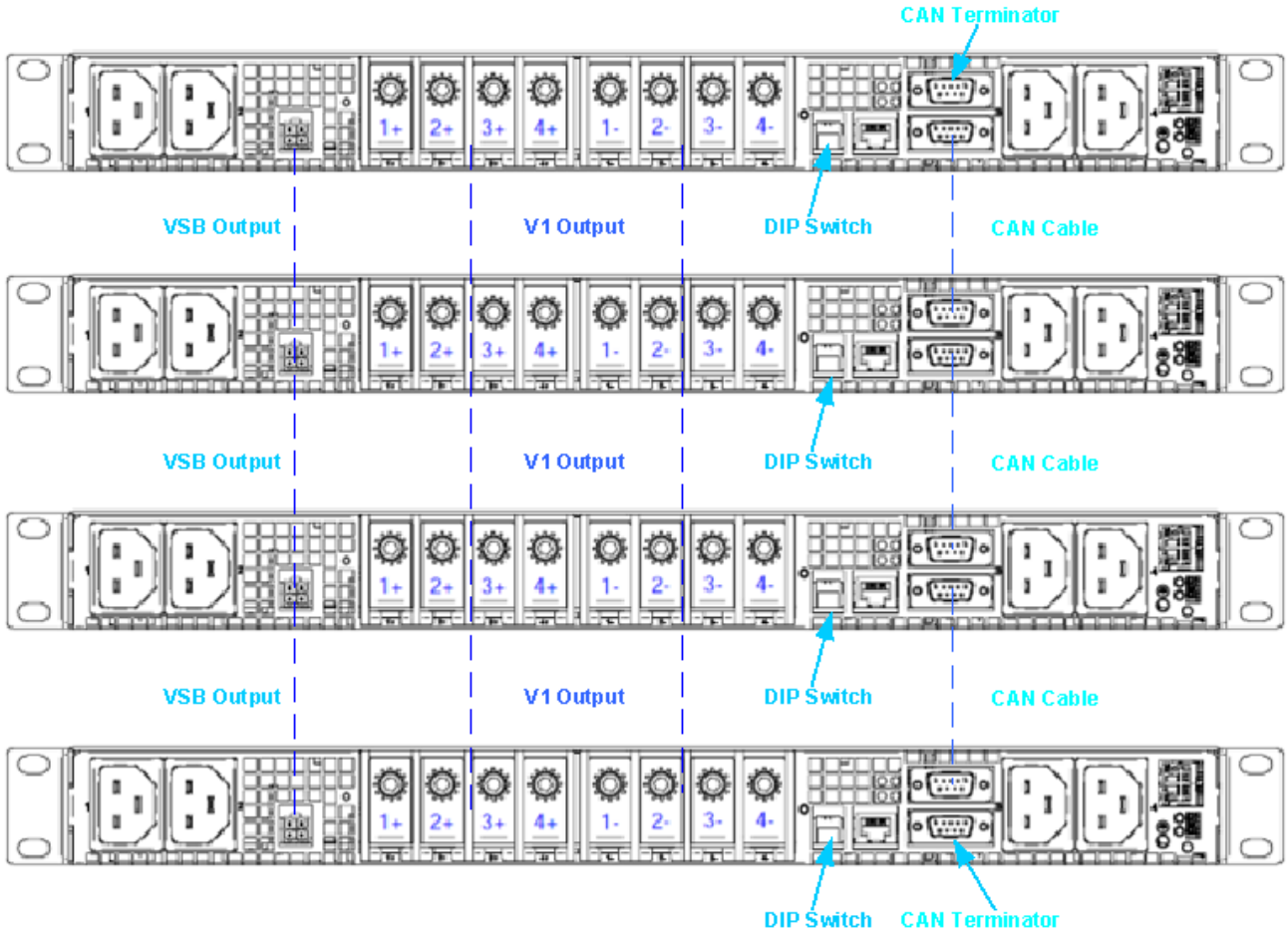


Figure 16. Parallel Operation

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

10. LEDs

10.1. POWER SUPPLY LEDS (FRONTSIDE)

Each power module has 1 LED to indicate status condition. The LED is bi-colored: green and yellow, and indicates AC and DC power presence and warning or fault conditions.

OPERATING CONDITION	LED STATE
Output ON and OK	Solid GREEN
No AC power to all power supplies	OFF
AC present / Only 12VSB on (PS off)	2Hz Blink GREEN
Power supply warning events where the power supply continues to operate; high temp, high power, high current, slow fan.	1Hz Blink YELLOW
Power supply critical event causing a shutdown; failure, OCP, OVP, Fan Fail	Solid YELLOW
Power supply in FW upload mode[4]	2Hz Blink GREEN

10.2. POWER SHELF LEDS (REAR SIDE)

LED	FUNCTION	DESCRIPTION
LED 1	INOK_L	On if INOK_L is low. See “Logic Signals”
LED 2	PSON_SHELF_L	On if PSON_SHELF_L is low. See “Logic Signals”
LED 3	-	Reserved
LED 4	Watchdog	Blink 1 Hz if the Shelf Controller is alive.

NOTE: All 4 LEDs will blink during the FW bootloader.

[4] To update the PSU firmware, the PSU must be in parallel mode.

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

11. SAFETY, REGULATORY AND EMC SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	CRITERION
Agency Approvals	Approved to the latest revisions/amendments of the following standards: UL/CSA 62368-1, EN 62368-1 and IEC 62368-1	Approved
Insulation	Input (L/N) to case (PE) Input (L/N) to output Output to case (PE)	Basic Reinforced Functional
Electrical Strength Test	Input to case Input to output (tested by manufacturer only)	Min. 2500 VDC Min. 5000 VDC
Conducted Emission	EN 55032 / CISPR 22: 0.15 … 30 MHz, QP and AVG	Class A
Radiated Emission	EN 55032 / CISPR 22: 30 MHz … 1 GHz, QP	Class A
Harmonic Emissions (per module)	IEC 61000-3-2, Vin = 230 VAC, 50 Hz, 100% Load (per module)	Class A
AC Flicker	IEC / EN 61000-3-3, d_{max} < 3.3%	PASS
ESD Contact Discharge	IEC / EN 61000-4-2, ±8 kV, 25+25 discharges per test point (metallic case, LEDs, connector body)	A
ESD Air Discharge	IEC / EN 61000-4-2, ±15 kV, 25+25 discharges per test point (non-metallic user accessible surfaces)	A
Radiated Electromagnetic Field	IEC / EN 61000-4-3, 10 V/m	A
Burst	IEC / EN 61000-4-4, level 3 AC port ±2 kV, 1 minute DC port ±1 kV, 1 minute	A
Surge	IEC / EN 61000-4-5 Line to earth: level 3, ±2 kV Line to line: level 2, ±1 kV	A
RF Conducted Immunity	IEC/EN 61000-4-6, Level 3, 10 Vrms	A
Voltage Dips and Interruptions (per module)	IEC/EN 61000-4-11 (per module) 1: Vi 230 VAC, 80% Load, Phase 0 °, Dip 100%, Duration 10 ms 2: Vi 230 VAC, 100% Load, Phase 0 °, Dip 100%, Duration < 100 ms 3. Vi 230 VAC, 100% Load, Phase 0 °, Dip 100%, Duration > 150 ms	A V1: B, VSB: A B

12. ENVIRONMENTAL SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
Operating Temperature	@ full load, up to 4000 m: @ full load, up to 1800 m:	0 0		+45 +50/+55[5]	°C
Non-Operating Temperature		-40		+70	°C
Humidity	Operating: @ at 40 °C, non-condensing Non-Operating: non-condensing	7 5		93 95	%RH
Altitude	Operating: Non-Operating:			4000 13000	m
Shock	Operating: 11 ms half-sine shocks in 6 axis 5 per each direction Non-Operating: 11 ms half-sine shocks in 6 axis 10 per each direction		6 12		g
Vibration	Operating: 0.5 g Sinusoidal in 3 axis (x, y, z) 10 sweep cycles for each direction (2 hours 13 minutes) Non-Operating: 1 g Sinusoidal in 3 axis (x, y, z) 10 sweep cycles for each direction (2 hours 13 minutes)	5 2		500 200	Hz
Cooling	When equipped with operating PSUs			50	Pa

[5] Maximum operating temperature: 50 °C with TET3600-48-104RA; 55 °C with TET3600-65-104RA.

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

13. CONNECTORS

DESCRIPTION	REFERENCE DESIGNATOR	TYPE	MANUFACTURER	MPN
Input Connector for SPSTET3-01 & SPSTET3-01N	IEC 60320	C22	Rong feng	SS-3BA-1.0-2.8
Input connector for SPSTET3-02 & SPSTET3-02N	/	HVDC	Anderson	2006G1

NOTE: Equivalent connectors might be used without notice.

13.1. CONNECTOR PIN ASSIGNMENT

Input connection for SPSTET3-01&SPSTET3-01N
MPN: Rong feng SS-3BA-1.0-2.8 or equivalent

Input connection for SPSTET3-02&SPSTET3-02N
MPN: Anderson 2006G1 or equivalent

PIN	FUNCTION	DESCRIPTION
1	Positive or Line	Pin 1 is as Line for AC input / and as Positive for DC input
2	Negative or Neutral	Pin 2 is as Neutral for AC input and as Negative for DC input
3	Ground	Protective bonding earth

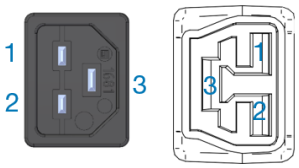


Figure 17. Input connector

14. MECHANICAL SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITIONS	MIN	TYP	MAX	UNIT
Dimensions	(W x H x D)		399 x 436 x 44.5 16.29 x 17.17 x 1.75		mm in
Weight	Shelf only		4.9		kg

14.1. SPSTET3-01 MECHANICAL DATA

NOTE: Finished good may look different from images.

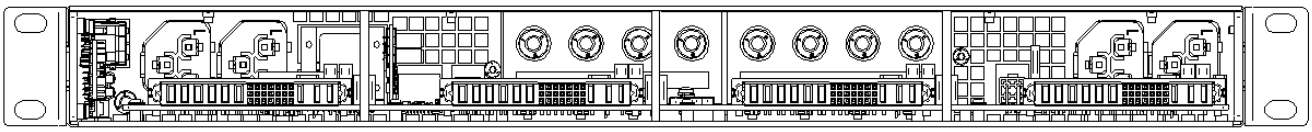


Figure 18. SPSTET3-01 & SPSTET3-01N PSU Bay Arrangement (Front View)

Asia-Pacific
+86 755 2988 5888
EMEA
+353 61 531 820
North America
+1 866 513 2839
powersupport@belf.com
belfuse.com

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

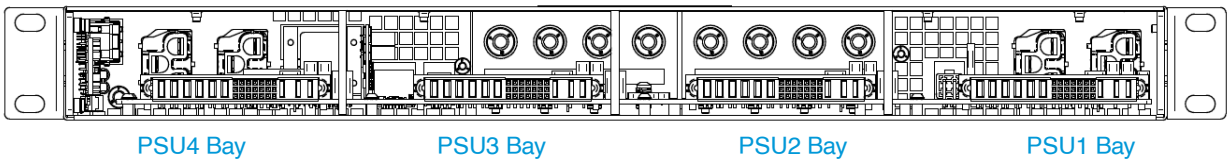


Figure 19. SPSTET3-02 & SPSTET3-02N PSU Bay Arrangement (Front View)

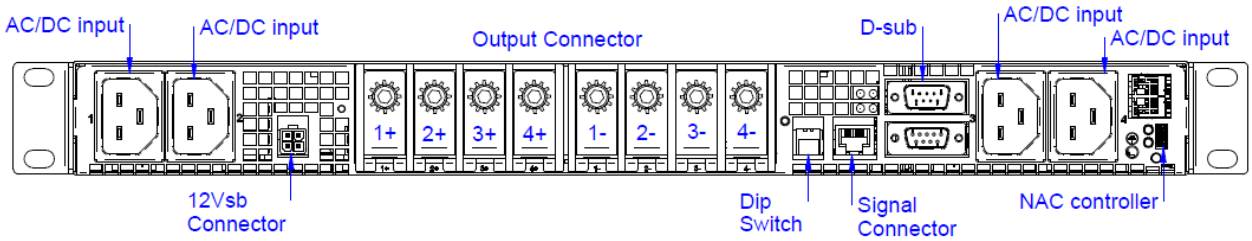


Figure 20. SPSTET3-01 & SPSTET3-01N Connector Positions (Rear View)

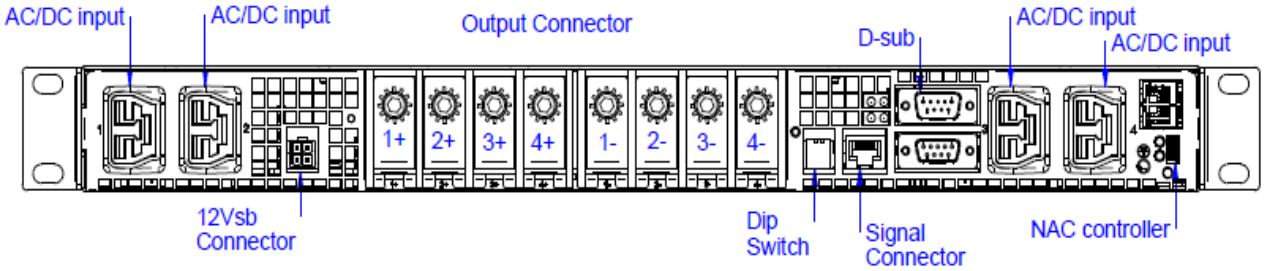


Figure 21. SPSTET3-02 & SPSTET3-02N Connector Positions (Rear View)

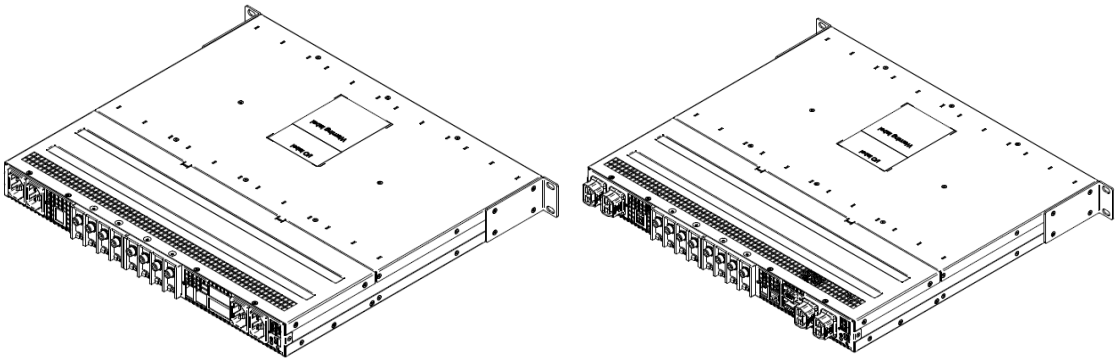


Figure 22. SPSTET3-01, SPSTET3-01N & SPSTET3-02, SPSTET3-02N (Isometric View)

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

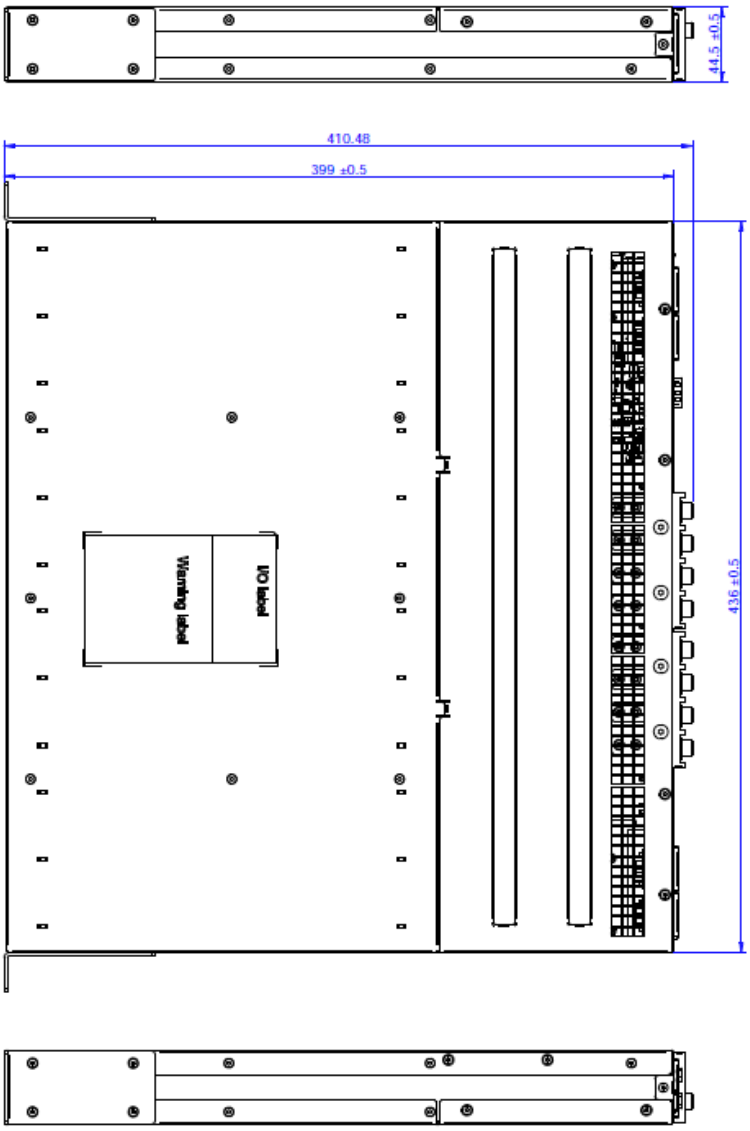


Figure 23. SPSTET3-01&SPSTET3-01N Mechanical Drawing with Dimensions (Front, Top, Side View)

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

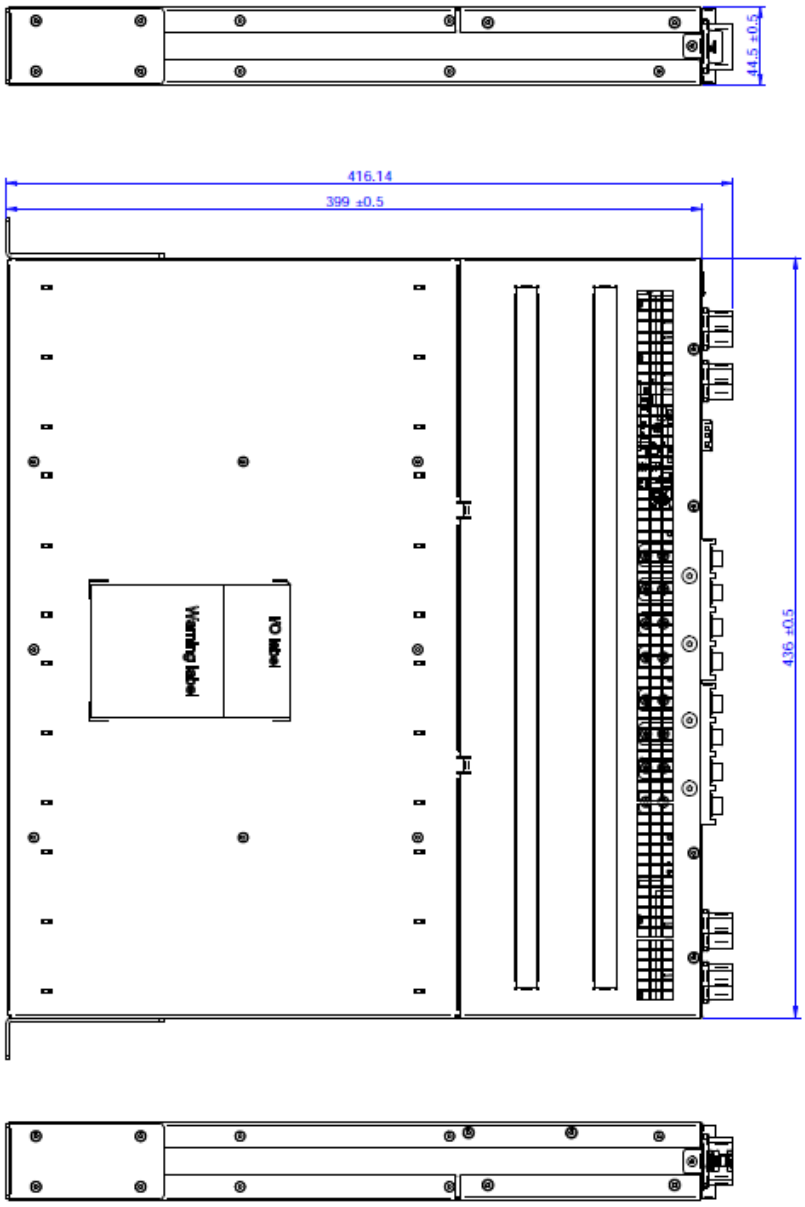


Figure 24. SPSTET3-02&SPSTET3-02N Mechanical Drawing with Dimensions (Front, Top, Side View)

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

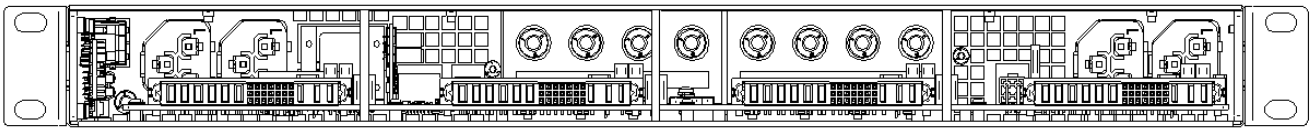
15. ACCESSORIES

ITEM	DESCRIPTION	ORDERING PN
Network Attached Controller	The Network Attached Controller provides easy access to monitoring and control func- tions through SNMP.	Build-in controller, refer to Section 1 for ordering P/N
Panel Blank	Power Rack Blanking Panel	SPSTET3-BP01
Output brackets(2PSUs)	Bracket(copper) to combine 2x PSUs output together, 2pcs	SPSTET3-BB02
Output brackets(3PSUs)	Bracket(copper) to combine 3x PSUs output together, 2pcs	SPSTET3-BB03
Output brackets(4PSUs)	Bracket(copper) to combine 4x PSUs output together, 2pcs	SPSTET3-BB04
CANBus Terminator (female) CANBus Terminator (male) CANBus Cable	D-SUB 9; Pinout the same as J205; 120 Ohm resistor between CAN_H and CAN_L D-SUB 9; Pinout the same as J205; 120 Ohm resistor between CAN_H and CAN_L D-SUB 9; Pinout the same as J205; Cable length = 110 mm	SPSTET4-CAN-KIT

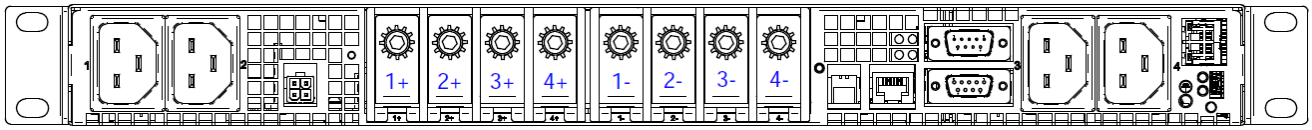
Panel blank and Output brackets orderable options:

1) Output brackets for combining PSUs 1+,2+ and 1-, 2-. And 2qty Panel blanks
2) Output brackets for combining PSUs 1+,2+, 3+ and 1-, 2-, 3-. And 1qty Panel blank
3) Output brackets for combining PSUs 1+,2+,3+,4+ and 1-, 2-,3-,4-.
4) Panel blank- customer order 3 if only one PSU is used in the shelf.

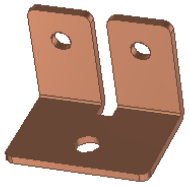
PSU bays:



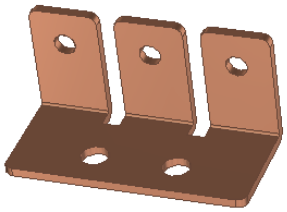
Output terminals:



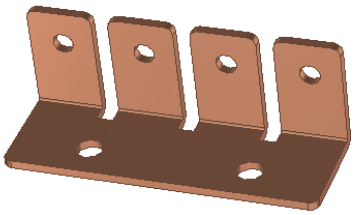
Brackets:



Output bracket (2 PSUs)



Output bracket (3 PSUs)



Output bracket (4 PSUs)

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.

16. REVISION HISTORY

REV	DESCRIPTION	PRODUCT VERSION	DATE	AUTHOR
1	Initial Draft	1	07-16-2024	GT Zhang
2	Update spec to align with actual parameter	2	11-08-2025	Bo Feng
A	Release to Rev A	3	07-01-2026	Bo Feng

For more information on these products consult: powersupport@belf.com

NUCLEAR AND MEDICAL APPLICATIONS - Products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.
TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

Asia-Pacific
+86 755 2988 5888

EMEA
+353 61 531 820

North America
+1 866 513 2839

powersupport@belf.com
belfuse.com

© 2026 Bel Fuse Inc. BCD.20290_A 7/7/2026

Downloaded from Arrow.com.