

### FEATURES 24V, 48V Inputs / Single, Dual, Triple Outputs

- High Efficiency
- Industrial Standard Pin Layout
- Encapsulated Small / Compact Size
- Wide 2:1 Input Range
- 300kHz Fixed Frequency
- Input / Output Isolation
- Surface Mount Technology
- Six-Sided EMI Shield
- Output Low Ripple / Noise
- Current Mode Control
- Remote On/Off Control (CNT)
- Output Voltage Adjustment (TRM)
- Over Voltage Protection (OVP)
- 3 Year Warranty

### ELECTRICAL SPECIFICATIONS

<b>Input</b>	<ul style="list-style-type: none"> <li>· Input Range ..... DC 24V(18 - 36), 48V(36 - 72)</li> <li>· Efficiency ..... 80 - 89% Typ.</li> <li>· Remote On/Off Control ..... TTL Compatible               <ul style="list-style-type: none"> <li>On : 2.5 to 5.5 Vdc or Open</li> <li>Off : 0 to 0.8 Vdc</li> </ul> </li> </ul>
<b>Output</b>	<ul style="list-style-type: none"> <li>· Output Voltages ..... 3.3V, 5V, 12V, 15V, ±5V, ±12V, ±15V, 3.3V/±12V, 3.3V/±15V, 5V/±12V, 5V/±15V</li> <li>· Operating Voltage Tolerance ..... ±2.0% (Single and Uncomplementary Dual), ±3.0% (Complementary Dual)</li> <li>· Line Regulation ..... ±0.25% Max. (Output 1), ±5.0% Max. (Output 2, 3)</li> <li>· Load Regulation ..... ±0.25% Max. (Single), ±2.5% Max. (Dual)               <ul style="list-style-type: none"> <li>±0.25% Max. (Output 1)</li> <li>±8.0% Max. (Output 2, 3) ]@Triples : 50% L-FL max (aux) bal. Loads</li> </ul> </li> <li>· Ripple and Noise ..... 1% of Vout (Bandwidth : 20MHz)</li> </ul>
<b>Protection Circuit</b>	<ul style="list-style-type: none"> <li>· Over Current Protection ..... Work Over 105% of Rating (Current Limited Output) (<b>NOTE 1</b>)</li> <li>· Over Voltage Protection ..... Work at 115 - 140% of Rating</li> </ul>
<b>Electrically Isolated</b>	<ul style="list-style-type: none"> <li>· Isolation ..... Input-Output, Input-Case, Output-Case / DC500V, 100MΩ</li> <li>· High Pot ..... Input-Output, Input-Case, Output-Case / AC500V, 1Min.</li> </ul>

### ENVIRONMENTAL

· Operating Temperature Range	-20°C ~ 71°C
· Option, See <b>NOTE 2</b>	-40°C ~ 85°C
· Operating Humidity (Non-Condensing)	20% ~ 90%RH
· Storage Temperature Range	-40°C ~ 105°C
· Storage Humidity (Non-Condensing)	10% ~ 95%RH
· Cooling Method	Convection
· EMI / RFI	Six-Sided Continuous Shield
· MTBF (MIL-HDBK-217F)	4.5 x 10 <sup>5</sup> hrs
· Safety	<ul style="list-style-type: none"> <li>Single Output ..... UL (UL 60950) : E227474</li> <li>Single, Dual, Triple Output ..... CE_LVD (EN 60950-1) through TÜV</li> </ul>

**NOTE** 1. Long term continuous operation into a short circuit will compromise the reliability of the unit.  
 2. As a factory added option, the all model can be operated from -40°C to 85°C, the suffix 'M' should be added to the model number when ordering. ex) PT25-48-522M

ORDERING INFORMATION

Input	Output1	Output2	Output3	Maximum Power	Ripple&Noise Max.	Efficiency Typ.	Model Number
18 - 36V	3.3V@6.00A			19.80W	100mVp-p	80%	PTS25-24-3R3
18 - 36V	5V@5.00A			25.00W	100mVp-p	85%	PTS25-24-5
18 - 36V	12V@2.00A			24.00W	120mVp-p	89%	PTS25-24-12
18 - 36V	15V@1.60A			24.00W	150mVp-p	89%	PTS25-24-15
18 - 36V	+5V@2.50A	-5V@2.50A		25.00W	75/75mVp-p	84%	PTD25-24-55
18 - 36V	+12V@1.00A	-12V@1.00A		24.00W	120/120mVp-p	88%	PTD25-24-1212
18 - 36V	+15V@0.80A	-15V@0.80A		24.00W	150/150mVp-p	87%	PTD25-24-1515
18 - 36V	+3.3V@3.50A	+12V@0.35A	-12V@0.35A	19.95W	75/120/120mVp-p	83%	PT25-24-322
18 - 36V	+5V@3.50A	+12V@0.35A	-12V@0.35A	25.90W	75/120/120mVp-p	84%	PT25-24-522
18 - 36V	+3.3V@3.50A	+15V@0.28A	-15V@0.28A	19.95W	75/150/150mVp-p	83%	PT25-24-3FF
18 - 36V	+5V@3.50A	+15V@0.25A	-15V@0.25A	25.00W	75/150/150mVp-p	84%	PT25-24-5FF
36 - 72V	3.3V@6.00A			19.80W	100mVp-p	81%	PTS25-48-3R3
36 - 72V	5V@5.00A			25.00W	100mVp-p	85%	PTS25-48-5
36 - 72V	12V@2.00A			24.00W	120mVp-p	89%	PTS25-48-12
36 - 72V	15V@1.60A			24.00W	150mVp-p	85%	PTS25-48-15
36 - 72V	+5V@2.50A	-5V@2.50A		25.00W	75/75mVp-p	84%	PTD25-48-55
36 - 72V	+12V@1.00A	-12V@1.00A		24.00W	120/120mVp-p	88%	PTD25-48-1212
36 - 72V	+15V@0.80A	-15V@0.80A		24.00W	150/150mVp-p	87%	PTD25-48-1515
36 - 72V	+3.3V@3.50A	+12V@0.35A	-12V@0.35A	19.95W	75/120/120mVp-p	83%	PT25-48-322
36 - 72V	+5V@3.50A	+12V@0.35A	-12V@0.35A	25.90W	75/120/120mVp-p	84%	PT25-48-522
36 - 72V	+3.3V@3.50A	+15V@0.28A	-15V@0.28A	19.95W	75/150/150mVp-p	83%	PT25-48-3FF
36 - 72V	+5V@3.50A	+15V@0.25A	-15V@0.25A	25.00W	75/150/150mVp-p	84%	PT25-48-5FF

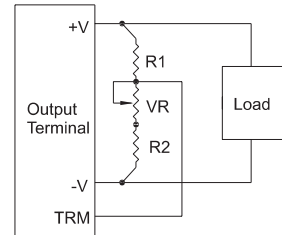
PIN ASSIGNMENTS

Single Output	Dual Output	Triple Output
1. +Vin	1. +Vin	1. +Vin
2. - Vin	2. - Vin	2. - Vin
3. No Pin	3. No Pin	3. No Pin
4. CNT (Enable)	4. CNT (Enable)	4. CNT (Enable)
5. No Connect	5. Output1	5. Output2
6. +Vout	6. COM	6. Output1
7. - Vout	7. Output2	7. GND
8. TRM	8. TRM	8. Output3

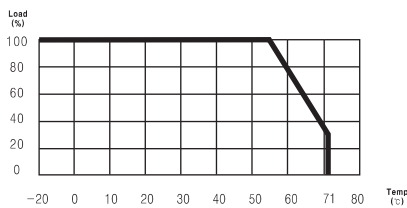
EXTERNAL PARTS

Model	Output Voltage	VR	R1	R2
PTS 25	5V	1kΩ	1kΩ	680Ω
	12V	1kΩ	3.9kΩ	680Ω
	15V	1kΩ	5.6kΩ	680Ω
PTD 25	±5V (10V)	1kΩ	3.3kΩ	680Ω
	±12V (24V)	5kΩ	9.0kΩ	820Ω
	±15V (30V)	5kΩ	20.0kΩ	910Ω

TRIM METHOD



DERATING CURVE



DIMENSIONS

