# **Industrial Adapter** 19V Series



Single Output 65W Non-PFC Data Sheet

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### **Description**

This series is a class 1, single-output AC to DC 65W green adapter with C6 inlet type. It can be operated from AC 90V~264V with good efficiency performance for various ITE, industrial and networking application. It also complies world-wide Safety and EMC regulations.

#### **Features**

- \* Full AC input voltage design with C6 socket
- \* Withstand 300Vac surge voltage for 5 seconds
- \* Full Protections: Short-circuit/ Over-voltage/ Over-current/ Over temperature operating.
- \* Energy efficiency level VI compliance
- \* Various DC plug types available
- \* IEC/EN 62368-1 design compliance
- \* Up to 5000 meters operating altitude (note #4)
- \* High reliability











## **Electrical Specification**

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Model Name	PA-1650-50		
Output			
Rated power	65W		
Rated voltage	19V		
Rated current	3.42A		
Ripple & Noise(max.) (note #2)	380mV		
Line & load regulation	±5%		
Hold-up time(typ.)	10ms		
Timing: AC ON delay / rising (max.)	2 sec / 30ms		
Input			
Rated voltage range	100~240Vac		
Operated voltage range	90~264Vac, 300Vac for 5 sec		
Current range (max.)	1.6A/100Vac		
Inrush current	No component damaged (< 2*t).		
Frequency range	50-60Hz		

Leakage current (max.)	0.05mA at 240Vac			
Average efficiency (typ.)	89%			
Protection Function				
Over voltage (max.)	150% of rated voltage, latch-off protection			
Over current (max.)	160% of rated current, latch-off protection			
Short circuit at O/P	No damage, latch-off protection			
Over temperature	No damage, latch-off protection			
Others				
MTBF (min.) (note#3)	500K hours @ rated load			
Environment				
Temperature	(operating) 0~35°C / (storage) -20~85°C			
Humidity	(operating) 10~90% RH non-condensing / (storage) 5~95% RH			
Altitude (max.)	5000 meters			
Mechanical				
Dimension	107.0(L)*47.0(W)*30mm(H)			
Vibration	10~500 Hz, 5G 20min./1cycle per axis for all axes (X, Y, Z)			
Weight (typ.)	230g			
Safety				
Standard	IEC/EN 60950-1, K60950-1, IEC/EN 62368-1, CNS14336-1			
Withstand voltage	Input-Output: 4242VDC / Input-FG: 2150VDC			
Isolation resistance(min.)	Input-Output: 30Mohm @ 500VDC, 25°C, 70%RH			
EMC				
EN55032 (CISPR32)	Conducted EMI: class B / Radiated EMI: class B			
FCC	Conducted EMI: class B / Radiated EMI: class B			
EN61000-3-2	Harmonic distortion: not applicable			
EN61000-4-2	ESD: ±8KV contact discharge / ±15KV contact discharge			
EN61000-4-3	Radiated RF immunity: 3V/m			
EN61000-4-4	EFT: ±1KV (AC port)			
EN61000-4-5	Surge: ±1KV DM / ±2KV CM			
EN61000-4-6	Conducted RF immunity: 3V/m			
EN61000-4-8	Magnetic field immunity: 3A/m			
EN61000-4-11	Voltage dip immunity			

## Notes

- #1: All specification defined at 230Vac/50Hz, rated power and 25°C ambient temperature if not mentioned specifically.
- #2: Ripple noise is measured with 0.47uF MLCC & 47uF low ESR capacitor.
- #3: Calculated by Telcordia SR332 at 25  $^{\circ}\text{C}\,$  ambient temperature.

#4: When operating altitude is higher than 2000m, the environment temperature derating factor is  $0.36^{\circ}$ C/100m.

## **Mechanical Specification**

