



ADLPS35ISO-150, 150W 2"x4" ATX Power Supply

Features

- **Small 2"x4" (50mm x 102mm) Footprint**
- **500V Galvanic Isolation**
- **Voltage and Current Specifications:**
 - VIN = 20-30V; 24V nominal
 - Maximum Input Current = 8A
 - Maximum Power = 150W Combined
 - Maximum Output Current: 5VS/5A, 5V/20A, 3.3V/5A, 12V/10A
- **Input Protection:**
 - Reverse Voltage
 - Overcurrent
 - Overvoltage / Undervoltage
 - Burst Protection
- **Output Protection:**
 - Voltage Out of Range (monitored via PWRGD)
 - Short-Circuit Protection
- **ATX Compliant Signals Available (PS-ON, PWRGD)**
- **Chassis and PC/104 Mounting Plates Optional**
- **Temperature Range: -40C to +85C**
- **UPS Port supports custom UPS Applications**



Ordering Information

Item Code	Part #	Description
ADLPS35ISO-150	293025	ADLPS35ISO-150 5V, 5VS, 3.3V, ET
Accessories		
ADLPS35ISO-150-104MT	293030	ADLPS35ISO-150 PC/104 mounting plate with hardware kit. Accepts MILCOTS Filter.
ADLPS35ISO-150-HSP	293037	ADLPS35ISO-150 Heat spreader for chassis mount with hardware kit
ADLPS35ISO-150-PC104ATX		ADLPS35ISO-150, 20P to 10P uFit conn, 5V/12V ATX Power Cable for PC/104 SBCs
ADLPS35ISO-150-35SBCATX		ADLPS35ISO-150, 20P to 16P uFit conn, 5V/12V ATX Power Cable for 3.5" SBCs
MILCOTS-FILTER	293031	MIL-STD 704/1275/461 Input Filter; 120w max.

Description

The ADLPS35ISO-150 board is designed to meet the needs of industrial and embedded motherboards by providing robust ATX voltages (5V, 5VS, 3.3V, 12V) in a small form factor power supply designed for -40C to +85C operation. Its small 2"x4" size (50mm x 102mm) allows it to fit many space limited applications.

The ADLPS35ISO-150 provides up to 500V of galvanic isolation from dirty power and unwanted transients and is tailored to work in conjunction with ADL Embedded Solutions' advanced high performance SBC's with more than enough headroom for inrush startup currents, and high-power quiescent operation.

In addition to 500V of galvanic isolation, input and output voltages are protected against overcurrent, overvoltage, undervoltage and reverse voltage. It is EMC compliant to EN61000-6-2 and EN61000-6-4 for industrial environments. External options include a MILCOTS filter option for MIL-STD 704/1275/461 military applications and a UPS port for custom battery applications.

The ADLPS35ISO-150 is optimized for long-life, rugged, embedded applications in a variety of industrial and military power environments. A judicious choice of components and circuit architecture has resulted in a long-life MTBF while its compact size (2" x 4") makes it ideal for rugged SFF embedded systems anywhere.

Data subject to change without notice.



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P200 Power Output



UPS Port supports custom UPS applications up to 100 seconds.

P400 Power Input

P200 - Power Output					
Description	Signal	Pin	Pin	Signal	Description
3.3V Power	3.3V	1	11	3.3V	3.3V Power
SUPS Active	SUSV	2	12	GND	Ground
5V Power	VCC	3	13	VCC	5V Power
5V Power	VCC	4	14	VCC	5V Power
Ground	GND	5	15	GND	Ground
Ground	GND	6	16	GND	Ground
12V Power	12V	7	17	12V	12V Power
5V Standby	SVCC	8	18	PWRBTN	Power Button
ATX PowerGood	ATX_PWRGD	9	19	PSON	PSU ON
I2C/UART	SMB_SDA/TX	10	20	SMB_SCL/RX	I2C/UART

P400 - Power Input		
Description	Signal	Pin
Battery Minus	BAT-	1
Battery Plus	BAT+	2
UPS+ (UPS Output)	24V UPS	3
Ground (Shielded)	S_GND	4
500V Galvanic Isolation		
VIN nominal 24V-	P_VIN-	5
VIN nominal 24+	P_VIN+	6
PC ON	PC_START	7
Power State	PC_AKTIV	8

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