



POWER SPECIALISTS FOR MOBILE COMPUTING

# LIND RUGGED ISOLATED DC/DC POWER ADAPTER (12 to 60 VDC INPUT)

**PCPE-LNDFHWR** 

compatible with CF-20, FZ-G1, FZ-M1, FZ-A3, CF-33, FZ-G2\*

\*= when in a docking station

#### **FEATURES**

- Electrical Isolation prevents ground loops
- Rugged aluminum housing
- Flanged end plates for easy mounting
- Low Input Voltage Disconnect
- High Input Voltage Disconnect
- Output Short Circuit Protection
- Output Over-Current Protection
- Internal Over-Temperature Protection
- Automatic Restart (10 seconds after fault removal)
- LED Indicator (Output Power Present)
- LED flash rate identifies fault
- Reverse Polarity Disconnect
- 1-year warranty

#### **TECHNICAL**

- INPUT VOLTAGE RANGE: 12 to 60 VDC
- □ OUTPUT VOLTAGE: 16 VDC
- OUTPUT POWER: 80 Watts
- ISOLATION: 500 VDC Input/Output Isolated (output tied to chassis)
- OPERATING TEMPERATURE: -20° to +40° C
- STORAGE TEMPERATURE: -40° to +85° C
- WEIGHT: appr. 570 gram (excluding cables)
- DIMENSIONS: appr. 240 x 75 x 30 mm
- MOUNTING HOLE SIZE: 5 mm



This Lind Power Adapter enables the user to run & charge a Toughbook from any 12-60 VDC power source by providing a regulated DC output. The adapter is specifically designed for the use in forklift, warehousing and railway applications. Voltage spikes and power surges occurring on the input voltage line are filtered by the adapter, eliminating potential damage to the adapter and Toughbook. Electrical isolation between input and output also prevents ground loops.

The adapter's electronics are protected in a rugged aluminum housing, filled and sealed with epoxy potting material, and thus protected from potential damage by shock, vibration, water and dust.

Efficient power conversion circuits with extensive protection features provide reliable and continuous power to your Toughbook. Combined with its rugged design, this Lind Power Adapter is ideally suited for the use in the most demanding environments.



USA OFFICE:

14850 Deveau Place Minnetonka, MN 55345

Phone: 952.927.6303 Fax: 952.927.7740

Web: www.lindelectronics.com Email: info@lindelectronics.com EUROPEAN OFFICE:
Gotthard-Mueller-Str. 5
70794 Filderstadt

Germany

Phone: +49 711 70707308 Mobile: +49 152 08561191

Email: meisele@lindelectronics.com



## LIND ELECTRONICS, INC.

### POWER SPECIALISTS FOR MOBILE COMPUTING

Characteristic	Min	Max	Units	Conditions
Electrical				
Output Voltage - No Lo	ad	16,5	Vdc	Vin=12-60VDC, IL=0A
- Full Loa	The state of the s	10,5	Vdc	Vin=12-60VDC, IL=5.0A
Tuli Edu	11,3		Vac	VIII-12 00 VB0, IE-3.0/1
Load Current	0	5,0	Α	Vin=12-60VDC
			100.00	
Output Power		80	W	Vin=12-60VDC
Input Voltage Range	12,0	60,0	Vdc	IL=0-5.0A
Input Current - No Lo		0,3	Α	Vin=12-60VDC
- Full Loa		8,3	Α	Vin=12.0VDC
- Full Loa	d	1,6	Α	Vin=60.0VDC
			104	
Efficiency - Full Los	ad 80		%	Vin=12-60VDC, IL=5.0A, at Adapter
Ripple/Noise - Full Loa	ad	250	m\/n n	Vin=12-60VDC, IL=5.0A, 20MHz BW
Ripple/Noise - Full Loa	au	230	mVp-p	Note: 47µf//.1µf across output
Start-up Time	0,5	1,5	S	Vin=12-60VDC, IL=0-5.0A
Start-up Time	0,5	1,5	3	VIII-12-00VDC, IE-0-3.0A
Protection				
Input Fuse		15	Α	Replaceable 3AG, input cable
Input Undervoltage Shutdown	9,5	10,5	Vdc	IL=5.0A, 10 second delay
Input Overvoltage Shutdown	61	65	Vdc	IL=0-5.0A
Output Overcurrent Shutdowr	5,5	7	Α	Vin=12-60VDC
Thermal Protection		Yes		Shutdown, Auto restart once cooled
Reverse Input Protection		Yes		Shutdown
Isolation		500	Vdc	Input to Output (Output tied to Chassis)
Shutdown Restart Time	9	11	S	Vin=12-60VDC, IL=0-5.0A
Environmental				
		,		
Ambient temperature -Operating	-20	40	°C	
-Storage	-40	85	°C	
Relative Humidity	-40	95	%	No condensation
		33	70	The solidation.
Mechanical		<i>x</i>		
Body Dimensions	9.3 x 3.	0 x 1.15	Inches	LxWxH
Adapter Weight		25	Ounces	
Agency Approvals				CE BOHS WEEE
Agency Approvais		2		CE, RoHS, WEEE