

# TECHNICAL DATA SHEET

## LPI® Signal & Data Protectors - DD Range



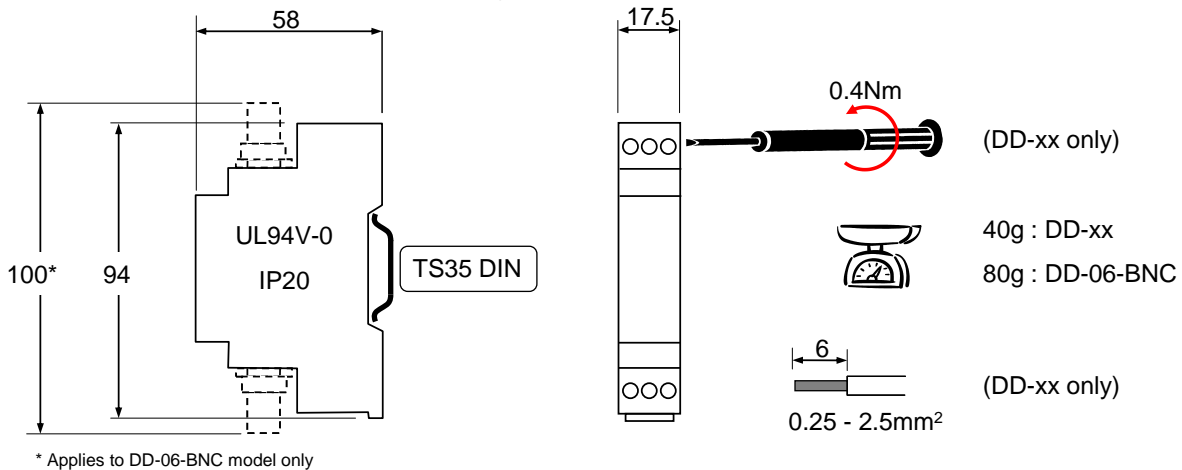
### Features

- High performance, low voltage surge protector
- Suitable for protection of data, signal and telecommunication pairs
- 3-Stage protection ensures lowest let-through voltage to protected equipment
- Protects loads of up to 2A
- High impulse discharge current rating - 20kA, 8/20µs
- Provides protection in both common and differential modes
- TS35 DIN rail mounting
- Suitable for fire alarm panels, RS232/485, process control signals, telephone lines and security networks

### Technical Data

Electrical Specifications		* DD-06	* DD-06-BNC	* DD-12	* DD-24	* DD-48	* DD-1T
Nominal Operating Voltage	U <sub>N</sub>	6V	6V	12V	24V	48V	Telephone
Max. Continuous Operating Voltage	U <sub>C</sub>	6.6V <sub>DC</sub> 4.7V <sub>RMS</sub>	6.6V <sub>DC</sub>	15.6V <sub>DC</sub> 11.0V <sub>RMS</sub>	29V <sub>DC</sub> 20V <sub>RMS</sub>	62V <sub>DC</sub> 44V <sub>RMS</sub>	190V <sub>DC</sub>
Surge Current rating (8/20µs)	I <sub>MAX</sub>	20kA					
Operating Current (DC or RMS)	I <sub>L</sub>	2A					150mA
Voltage Protection Level @ 3kA (8/20µs)	U <sub>P</sub>	16V	16V	28V	60V	120V	240V
Loop Resistance		< 0.1Ω					6.6Ω
Bandwidth		5MHz					1MHz
Protection Modes		Line-Line & Line-Ground					
Operating Temperature		-40°C to 60°C					

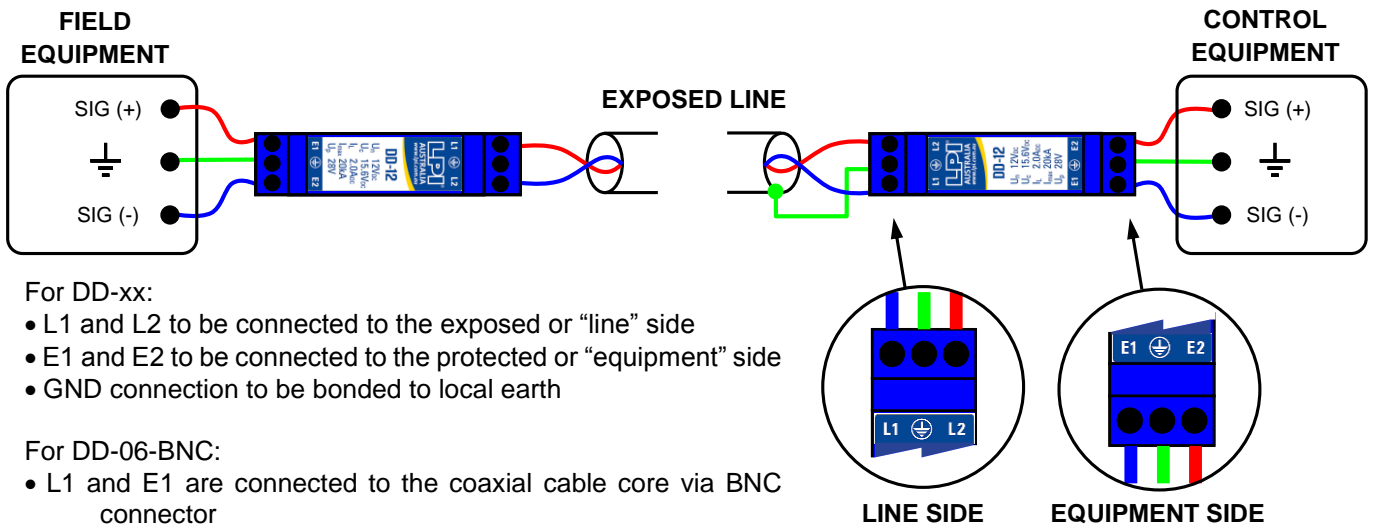
Customised options available on request  
 \* PRODUCT ORDER CODE: Please add '-BOX' to the product code for supply in boxes of 10 units per box.  
 Example: DD-xx-BOX or DD-xx-BNC-BOX where xx denotes the voltage.



# TECHNICAL DATA SHEET

Application	DD-06	DD-06-BNC	DD-12	DD-24	DD-48	DD-1T
RS-232				✓		
RS-422	✓					
RS-485			✓			
Fire Alarm Panels				✓		
Security Systems			✓	✓		
Process Control loops				✓		
C-BUS					✓	
Analogue telephone line						✓
Digital telephone line						✓
CCTV		✓				

## Installation



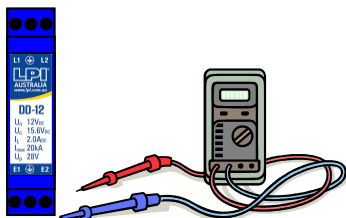
For DD-xx:

- L1 and L2 to be connected to the exposed or “line” side
- E1 and E2 to be connected to the protected or “equipment” side
- GND connection to be bonded to local earth

For DD-06-BNC:

- L1 and E1 are connected to the coaxial cable core via BNC connector
- L2 and E2 are connected to the coaxial cable screen via BNC connector
- GND connection to be bonded to local earth

## Testing



A PASS result is obtained if measurements meet the specifications listed in the adjoining tables.

	DD-06, -12, -24, -48	DD-1T		DD-06-BNC
L1-E1	≤ 0.5Ω	≤ 10Ω	CORE (L) - CORE (E)	≤ 0.5Ω
L2-E2	≤ 0.5Ω	≤ 10Ω	SCREEN (L) - SCREEN (E)	≤ 0.5Ω
GND-GND	≤ 0.5Ω	≤ 0.5Ω	GND-GND	≤ 0.5Ω
E1-E2	> 1MΩ	> 1MΩ	CORE (E) - SCREEN (E)	> 1MΩ
E1-GND	> 1MΩ	> 1MΩ	CORE (E) - GND	> 1MΩ
E2-GND	> 1MΩ	> 1MΩ	SCREEN (E) - GND	> 1MΩ

Head Office | 49 Patriarch Drive, Huntingfield Tasmania, Australia 7055  
 Postal | PO Box 379 Kingston, Tasmania, Australia 7051  
 Web | www.lpi.com.au

Phone | + 61 3 6281 2475  
 Facsimile | + 61 3 6229 1900  
 Email | info@lpi.com.au