

# Data Sheet

DP-40044-08-000

*xtremeDBm*

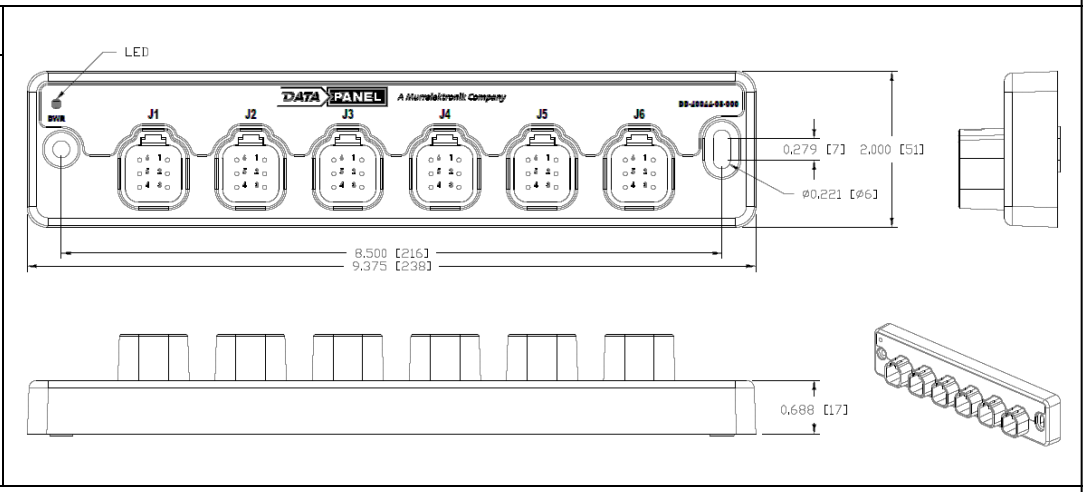
**XDBM06-CAN**  
**Molded Plastic**

**Module**  
**6 Pin Splitter**

**6 Pin Splitter  
Power LED**

**8...32 Vdc**

	<p>Since 1990</p>



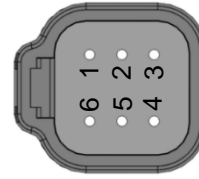
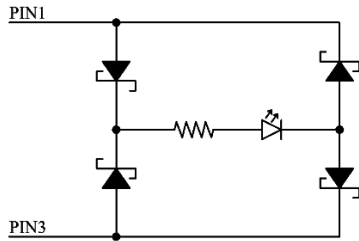
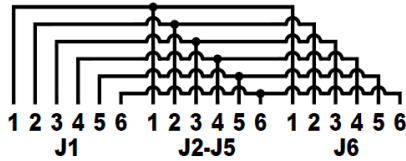
### Technical Data

<i>Housing</i>	<i>Molded glass filled nylon</i>
<i>Dimensions (l x w x h)</i>	<i>2.000 x 9.375 x 1.34 in (51 x 239 x 34 mm)</i>
<i>Weight</i>	<i>0.628 lbs (0.285 kg)</i>
<i>Installation (mounting hardware not included)</i>	<i>Screw: 2 x #10 (2 x M5) Torque: 21 in-lbs (2.4 Nm) max.</i>
<i>Mating Connectors and Accessories</i>	<i>6 Pole Plug 10 x DT06-6S or equivalent</i>
<i>DEUTSCH® size 16 Socket</i>	<i>0462-201-16141 (16 – 20 AWG)</i>
<i>DEUTSCH® Seal Plug</i>	<i>1062-16-0122 (14 – 18 AWG)</i>
<i>Total CAN Splitters</i>	<i>114017</i>
<i>Operating Voltage (Power)</i>	<i>6</i>
<i>Switching Current</i>	<i>8...32 V DC</i>
<i>Total Current (Power)</i>	<i>13 A per circuit max.</i>
<i>Operating Temperature</i>	<i>26 A max.</i>
<i>Storage Temperature</i>	<i>-40...85 °C</i>
<i>Protection Class</i>	<i>-40...85 °C</i>
	<i>IP67: Connector seal plugs required for unused pins. Sealing plugs required for unused ports IP68/IP69K: Using MDC xtreme cables.</i>

Operating States (LEDs)	Color	Status
PWR	Blue	Module and Ports power are connected

Rev.	Description	Date	Name		Date	Name	<div>Data Sheet</div> <div>xtremeDBm CAN Splitter</div> <div>xDBm06-CAN</div>	
				Originator	03.11.25	WA		
				Approved				
				<div><div>DATA</div><div>PANEL</div><div>A Murrelektronik Company</div></div>				
							Art. No.: DP-40044-08-000	Sheet 1 of 4
a	DCN G319	03.11.25	MH	DP-40044-08-000_db_e_a.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

## Connector Interface



### Connections:

#### Ports J1 to J6

Pin 1 = POWER/GND  
 Pin 2 = CAN High/Passthrough  
 Pin 3 = POWER/GND  
 Pin 4 = Can Low/Passthrough  
 Pin 5 = Pass Through  
 Pin 6 = Pass Through

Ports are connected internally in series with each other to conform to trunk/drop system.


Power LED Pin 1 to Pin 3 with full bridge rectifier to light up in either polarity.

## Article Numbers

DP-40044-08-000

6 Pin Deutsch Splitter Power LED (Pin 1 to Pin 3)



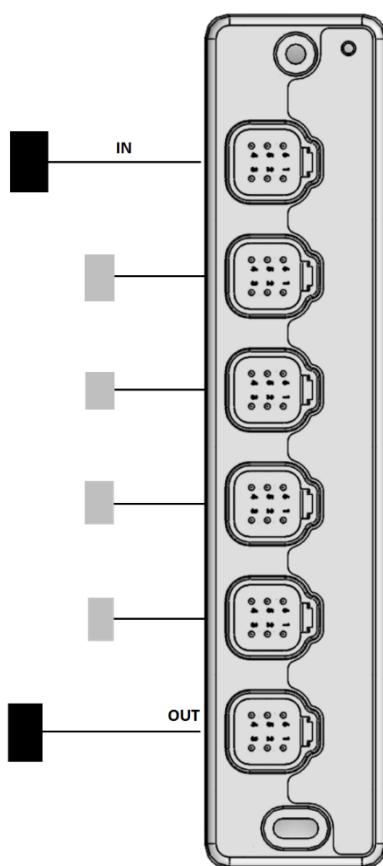
Rev.	Description	Date	Name		Date	Name	Data Sheet	
				Originator	03.11.25	WA		
				Approved				
				 A Murrelektronik Company			Art. No.: DP-40044-08-000	
a	DCN G319	03.11.25	MH	DP-40044-08-000_db_e_a.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

Sheet  
2 of 4

## Application Notes

BUS LINE / BACKBONE

DROP LINE / CABLE TAIL



### Sample Topology of Drop Lines:

The following table shows the maximum drop line lengths and the maximum length of the CAN bus line. The table specifies the maximum drop line lengths and the maximum length of the CAN bus line (drop lines not included) using a splitter.


Baud Rate	Drop Line Length	Total Length
1 Mbit/s	< 0.3 m	< 25 m
500 kbit/s	< 1.2 m	< 66 m
250 Kbit/s	< 2.4 m	< 120 m
125 Kbit/s	< 4.8 m	< 310 m

### SIGNAL REFLECTIONS CAUSED BY DROP LINES!

Drop lines can give rise to signal reflections in CAN networks.

When using splitters in CAN networks, the possible drop line lengths are reduced further.

- Drop lines should vary in length to reduce the rise of signal reflections.
- Terminate the bus line at both ends with a 120  $\Omega$  resistor.
- Do not terminate drop lines with a resistor under any circumstances!

Rev.	Description	Date	Name		Date	Name	<b>Data Sheet</b>  <b>xtremeDBm CAN Splitter</b> <b>xDBm06-CAN</b>	
				Originator	03.11.25	WA		
				Approved				
				 A Murrelektronik Company			<b>Art. No.: DP-40044-08-000</b>	
a	DCN G319	03.11.25	MH	DP-40044-08-000_db_e_a.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

### **Warranty and Liability Claims**

Data Panel Corporation warrants the original purchaser of its products that the products are free of defects in materials and workmanship, when operated under normal conditions and in accordance with accepted industry recommended practices. The standard warranty period is 12 months from the date the product is first put into service but not to exceed 18 months from the date of shipment.

Products must be returned, freight prepaid, to Data Panel for inspection. A Return Material Authorization (RMA) number must be obtained from that location before shipment is made, and clearly indicated on the shipping package. Product must be received within 3 months of the claim as per the requirements of the Returned Goods Process, which is considered to be part of the warranty. Data Panel reserves the right to repair or replace any product found to be under warranty. This warranty policy does not provide for a refund or credit for defective material.

This warranty is null and void if in the judgment of Data Panel, the part had been used in the wrong application, damaged, improperly maintained or repaired, subjected to inappropriate environmental and operating conditions, repaired by a non-approved party without prior authorization, not used in accordance with the operational and service recommendations, or repaired with other than approved parts.

This warranty is in lieu of all other warranties, express or implied and may be varied only by a separate agreement signed by duly authorized representatives of Data Panel Corp. Data Panel makes no warranty of merchantability of fitness for a particular purpose. Data Panel's entire and exclusive liability and the buyers exclusive and sole remedy, in connection with the consequential damages, including loss of use or travel, labor or material cost to remove or reinstall the product, should under no circumstances exceed the original cost for the products for which liability claimed.

Data Panel and Murrelektronik have checked the contents of this technical documentation for conformity with the hardware or software described. Deviations cannot be excluded in individual cases, which is why Data Panel and Murrelektronik exclude the warranty for the correctness of the contents and the liability for errors, in particular for complete conformity. The limitation of liability does not apply insofar as the cause of damage is due to intent and/or gross negligence. Insofar as a material contractual obligation has been breached due to slight negligence, the liability of Data Panel and Murrelektronik shall be limited to the damage typically incurred.

We reserve the right to make technical and content-related changes. We recommend that you check at regular intervals whether this documentation has been updated, as corrections that may become necessary, for example, as a result of technical developments, are regularly incorporated by Data Panel on a regular basis. We are always grateful for suggestions for improvement.

To the maximum extent permitted by applicable law, in no event shall Data Panel, Corp. or Murrelektronik, Inc. be liable for any special, incidental, indirect, or consequential damages whatsoever (including, but not limited to, damages for loss of profits or confidential or other information, for business interruption, for personal injury, for loss of privacy, for failure to meet any duty including of good faith or of reasonable care, for negligence, and for any

other pecuniary or other loss whatsoever) arising out of or in any way related to the use of or inability to use the software product, the provision of or failure to provide support services, or otherwise under or in connection with any provision of this End User License, even in the event of the fault, tort (including negligence), strict liability, breach of contract or breach of warranty of Data Panel, Corp or Murrelektronik, Inc. or any supplier, and even if Data Panel, Corp. or Murrelektronik, Inc. or any supplier has been advised of the possibility of such damages.

Rev.	Description	Date	Name		Date	Name	<div>Data Sheet</div> <div>xtremeDBm CAN Splitter</div> <div>xDBm06-CAN</div>		
				Originator	03.11.25	WA			
				Approved					
				<div><div>DATA</div><div>PANEL</div></div> <div>A Murrelektronik Company</div>					
				<div>Art. No.: DP-40044-08-000</div> <div>Sheet 4 of 4</div>					
a	DCN G319	03.11.25	MH	DP-40044-08-000_db_e_a.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.		