

# Data Sheet

**DP-40044-00-000**

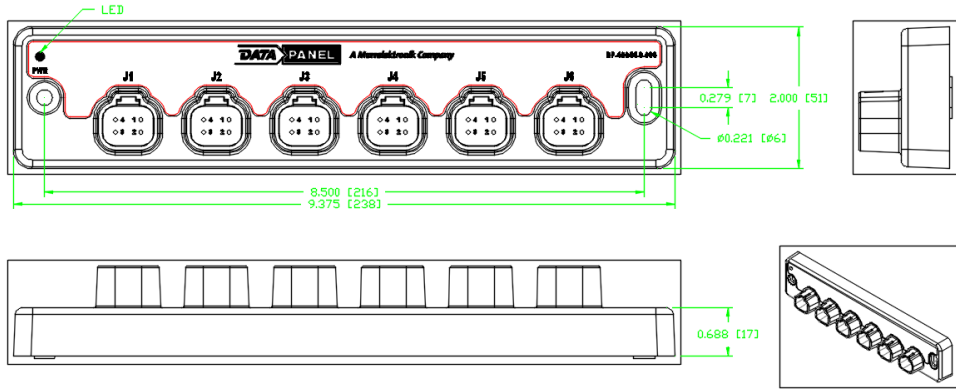
**xtremeDBm**

**xDBm06-CAN**

**Molded Plastic**


**Module  
4 Pin Splitter**

**8...32 Vdc**



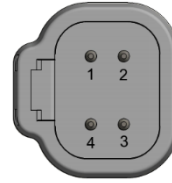
## Technical Data

<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>0.66 lbs (0.30 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>4 Pole Plug 10 x DT06-4S or equivalent</i>
<i>DEUTSCH® size 16 Socket</i>	<i>0462-201-16141 (16 – 20 AWG) 1062-16-0122 (14 – 18 AWG)</i>
<i>DEUTSCH® Seal Plug</i>	<i>114017</i>
<i>Total CAN Splitters</i>	<i>6</i>
<i>Operating Voltage (Power)</i>	<i>8...32 V DC</i>
<i>Switching Current</i>	<i>13 A per circuit max.</i>
<i>Total Current (Power)</i>	<i>26 A max.</i>
<i>Operating Temperature</i>	<i>-40...85 °C</i>
<i>Storage Temperature</i>	<i>-40...85 °C</i>
<i>Protection Class</i>	<i>IP67: Connector seal plugs required for unused pins. Sealing plugs required for unused ports IP68/IP69K: Using MDC xtreme cables.</i>

				Date	Name	<b>Data Sheet</b>  <b>xtremeDBm CAN Splitter</b> <b>xDBm06-CAN</b>	
			Originator	07.12.21	FSa		
			Approved	07.12.21	FSa		
			 <b>A Murrelektronik Company</b>			<b>Art. No.: DP-40044-00-000</b>	Sheet
b	DCN 6022	08.28.23	AH				1 of 4
Rev.	Description	Date	Name				
a	DCN F714	07.12.21	FSa	DP-40044-00-000_db_e_a	The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.		



## Connector Interface



**Connections:**

**Ports J1 to J6**

- Pin 1 = POWER
- Pin 2 = CAN HIGH
- Pin 3 = GROUND
- Pin 4 = CAN LOW


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

Power LED Pin 1 to Pin 3

### Article Numbers

DP-40044-00-000	4 Pin Deutsch Splitter w/ LED (Pin 1 to Pin 3)
DP-40044-00-001	4 Pin Deutsch Splitter w/o LED

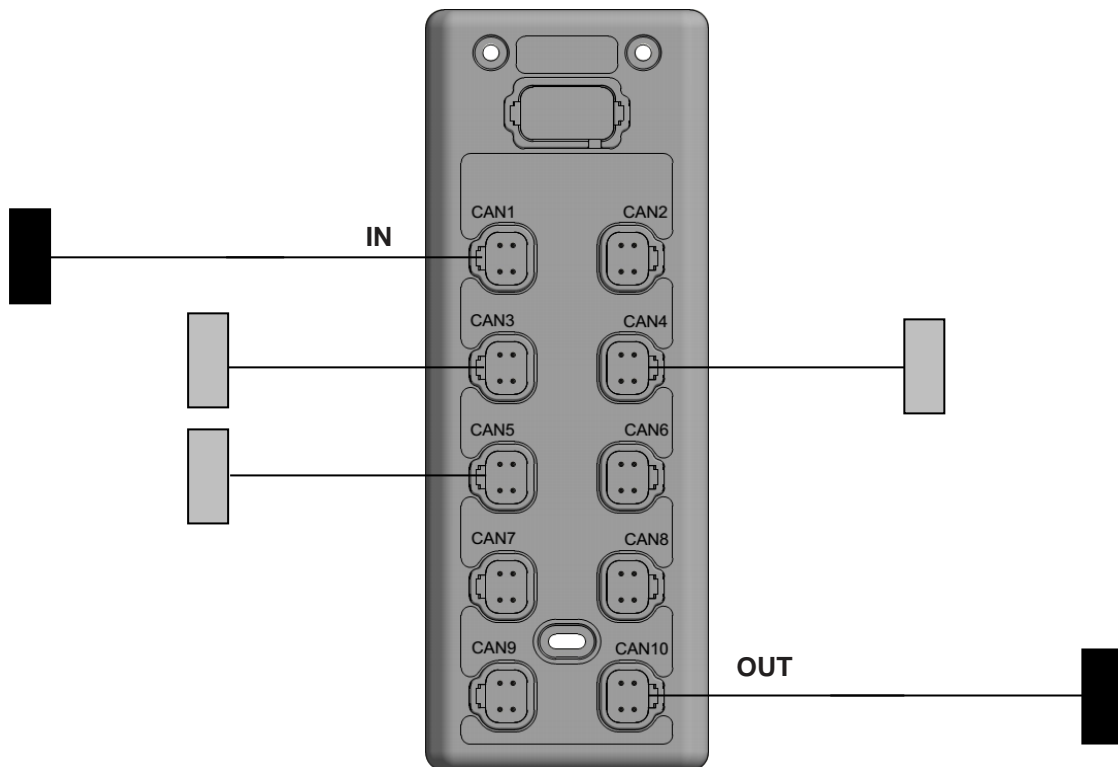


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Application Notes

**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 Ω resistor.
- Do not terminate drop lines with a resistor under any circumstances!

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