Data Sheet

DP-34044-3-000

xtremeDB

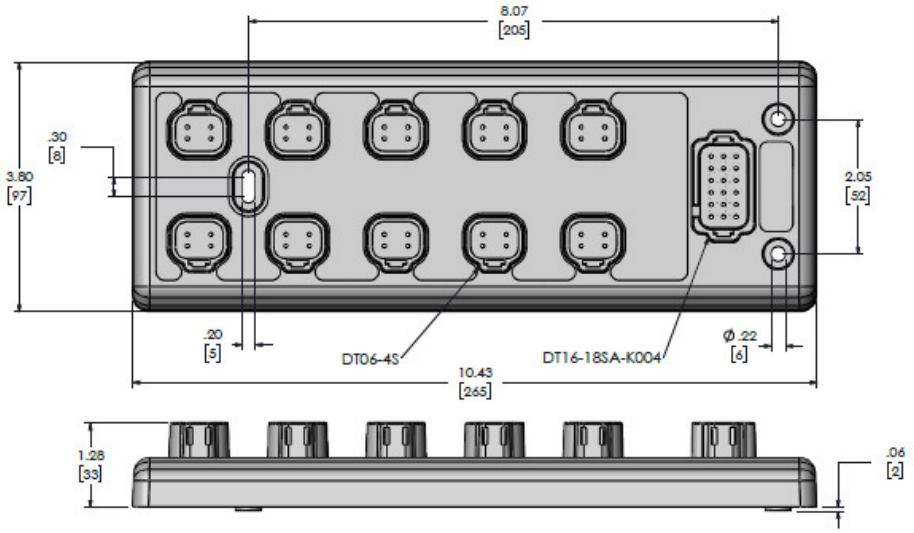
xDB16-PWM

Molded Plastic

Output Module
Digital and PWM

J1939

8…32 Vdc



Technical Data	
Housing	*Molded glass filled nylon*
Dimensions (l x w x h)	*3.80 x 10.43 x 1.34 in (97 x 265 x 34 mm)*
Weight	*1.5 lbs (0.68 kg)*
Installation (mounting hardware not included)	*Screw: 3 x #10 (3 x M5)* *Torque: 21 in-lbs (2.4 Nm) max.*
Mating Connectors and Accessories *Operating Voltage, Ground, and Configuration* *I/O-Ports* *DEUTSCH size 20 Socket* *DEUTSCH size 16 Socket* *DEUTSCH Seal Plug*	 *18 Pole Plug DT16-18SA or equivalent* *4 Pole Plug 10 x DT06-4S or equivalent* *0462-201-20141* *0462-201-16141* *114017-ZX*
Maximum Cable Length	*98.4 ft (30 m) max.*
Operating Voltage	*8…32 V DC protected against reverse polarity*
Operating Current	*13 A continuous per pin max.* *52 A node current max.*
Communication Interface and Baud Rate	*2 non-isolated J1939 ports 250kb (default) & 500kb*
Source Address	*Base Address 224d (0xE0h)* *Offset 0…15 (J0: CNFGx-A/B)*
Total Outputs	*16 (14 x 4 A and 2 x 10 A)*
Outputs Diagnostics	*Short circuit and Overcurrent*
Operating Temperature	*-40…80 °C*
Storage Temperature	*-40…85 °C*
Protection Class	*IP67: Connector seal plugs required for unused pins.* *Sealing plugs required for unused ports* *IP68/IP69K: Using Murrelektronik MDC xtreme cables.*

					Date	Name
				Originator	01.18.17	JNa
				Approved	02.10.17	KGu
c	DCN F257	04.07.20	FSa			
b	DCN F208	03.13.20	FSa			
Rev.	Description	Date	Name			
a	Initial release	02.10.17	JNa			

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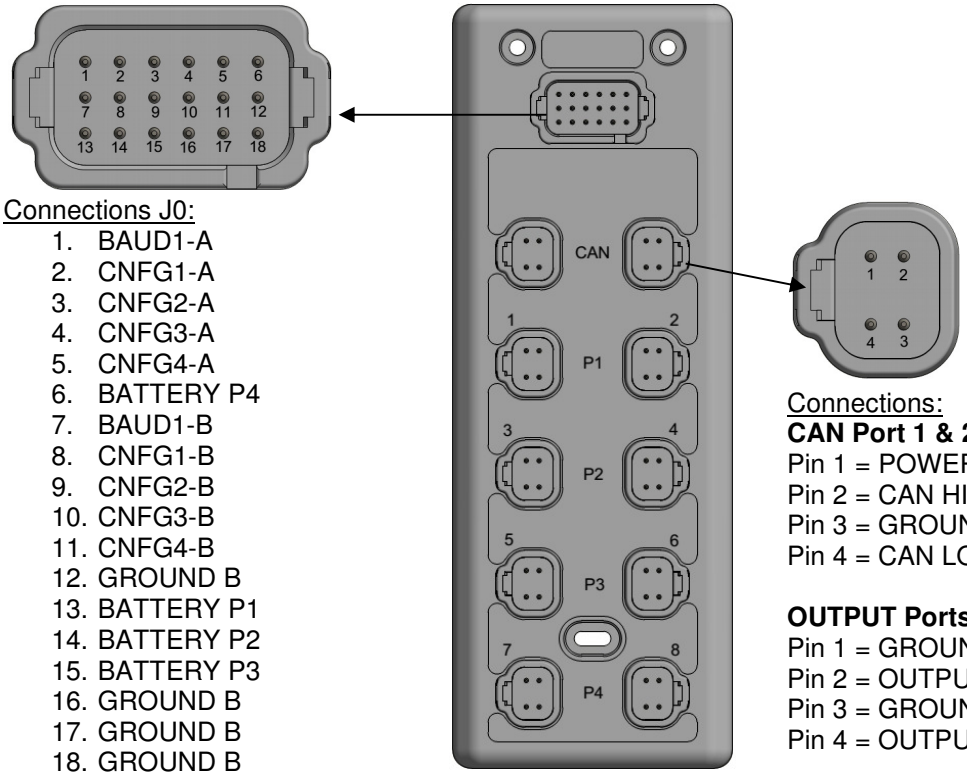
Characteristics of the output ports

Outputs	*Digital Output* *Output voltage* *8…32 Vdc* *Switching current* *4 Amps* *10 Amps (Port1A Pin-4)* *10 Amps (Port3A Pin-4)* *PWM & PWM(i) Output* *PWM frequency* *40-1100 Hz* *PWM(i) frequency* *100-700 Hz* *Switching current* *4 Amps*

Operating States (LEDs)	*Color*	*Status*
PWR	*Blue*	*Module and Ports power are connected*
COM & STAT	*Green*	*Module and Communication status*
FLT	*Red*	*Fault Status*
P1 – P4	*Blue*	*Bus Power (Port Output Power)*
OUT	*Yellow*	*Left LED – Output A* *Right LED – Output B*

Connector Interface



Connections J0:

1. BAUD1-A
2. CNFG1-A
3. CNFG2-A
4. CNFG3-A
5. CNFG4-A
6. BATTERY P4
7. BAUD1-B
8. CNFG1-B
9. CNFG2-B
10. CNFG3-B
11. CNFG4-B
12. GROUND B
13. BATTERY P1
14. BATTERY P2
15. BATTERY P3
16. GROUND B
17. GROUND B
18. GROUND B

Connections:
CAN Port 1 & 2
Pin 1 = POWER
Pin 2 = CAN HIGH
Pin 3 = GROUND A
Pin 4 = CAN LOW

OUTPUT Ports 1 to 8
Pin 1 = GROUND B
Pin 2 = OUTPUT B
Pin 3 = GROUND B
Pin 4 = OUTPUT A

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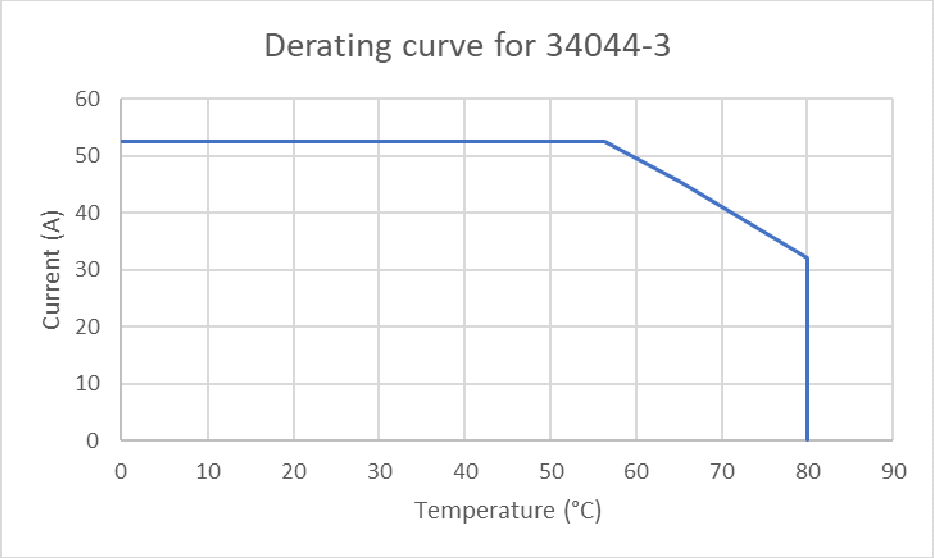
Test Standards and Regulation	
Climatic test	*Cold Temperature to IEC 60068-2-1:2007, test Ad* *Dry Heat to IEC 60068-2-2:2007, test Bb* *Temperature Durability to IEC 60068-2-14:2000-08, test Nb* *Temperature Shock to IEC 60068-2-14:2000-08, test Na* *Humidity Soak to IEC 60068-2-78:2001, test Cab* *Humidity Cycle to IEC 60068-2-30:2005, test Db*
Mechanical test	*Swept Sine Vibration to IEC 60068-2-6:2007, test Fc* *Random Vibration to IEC 60068-2-64:2008, test Fh* *Resonance Vibration to IEC 60068-2-6:2007, Section 8.1* *Mechanical Shock to EN 60068-2-27:2008, test Ea* *Mechanical Bump to EN 60068-2-27:2008, test Ec* *IP protection to EN 60529:2000-09, test IP67, IP68, IP69K* *Chemical Loads to ISO 16750-5:2010 Part 5: AA, BA, BC, BD, BE, CC, DB, DD*
Electrical test	*Electrical Tests to ISO 16750-2:2012* *EMC Immunity to ISO 13766-1:2018, ISO 13766-2:2018, ISO 13309:2010* *EMC Emissions to ISO 13766-1:2018, ISO 13766-2:2018, ISO 13309:2010* *Conducted Transients to ISO 13766-1:2018, ISO 13766-2:2018, ISO7637-2:2011, Annex A*
CE	*RoHS: Directive 2011/65/EU* *EMI/EMC: Directive 2014/30/EU*

Derating Curve Max Total Current



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Article Numbers	
DP-34044-3-000	J1939 Slave Module
DP-34044-3-200	CANopen Slave module

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c	DCN F257	04.07.20	FSa			
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