DATA SHEET

DP-43016-4

xtremeHB™ H-Bridge Module

J1939 Slave Node

Four Connectors with Two 25 Amp Pins

This product is a DC Load reversing circuit that acts as a CAN slave node. With its fully solid-state design, it is ideal for off-road conditions including construction, road maintenance, and marine environments.

Connector Pinout			
Connector	Function	Description	Rating
CAN1-1	Logic Power	Battery (8... 32V DC)	
CAN1-2	CAN 1 High	CAN+	
CAN1-3	GND	CAN GND	
CAN1-4	CAN 1 Low	CAN-	
CAN1-1	Logic Power	Battery (8... 32V DC)	
CAN2-2	CAN 2 High	CAN+	
CAN2-3	GND	CAN GND	
CAN2-4	CAN 2 Low	CAN-	
J1-1	Dig Output H1-B	H-Bridge	25 A
J1-2	Dig Output H1-A	H-Bridge	25 A
J2-1	Dig Output H2-B	H-Bridge	25 A
J2-2	Dig Output H2-A	H-Bridge	25 A
J3-1	Dig Output H3-B	H-Bridge	25 A
J3-2	Dig Output H3-A	H-Bridge	25 A
J4-1	Dig Output H4-B	H-Bridge	25 A
J4-2	Dig Output H4-A	H-Bridge	25 A
POWER	Output Power	Power Lug	100 A
GROUND	Battery Return	Ground Lug	100 A

Mechanical Data	
Housing	Molded glass filled nylon
Dimensions (l x w x h)	8.25 x 3.929 x 1.625 (209.6 x 99.8 x 41.3 mm)
Weight	1.74 lb. (789 g)
Graphic	Black polyester matte
Torque Specification	Power Stud (3/8-16): dry torque 154 in-lbs. Ground Stud (5/16-18): dry torque 86 in-lbs.

Technical Data	
Connections: Connectors Mating Connectors Power Feed Ground Feed	MFG (DP): 4 pin DEUTSCH DT06-4S or equivalent x 2 2 pin DEUTSCH DTP10-2P (134-5315-00504) x 4 4 pin DEUTSCH DT06-4SA (134-1000-00604) 2 pin DEUTSCH DTP06-2S (134-5002-F0502) x 4 3/8-16 stud 5/16-18 stud
Operating Voltage	8.0 - 32.0 V DC
Switching Current	4 H-Bridge A/B pairs at 25 Amps each
Total Module Current	100 A
Operating Temperature	-40…85 °C
Storage Temperature	-40…85 °C
Ingress Protection	IP67

LEDs	Color	Status
STAT	RGB	Power to module
COM	RGB	Communication status
H-Bridge I/O	RGB	Output status

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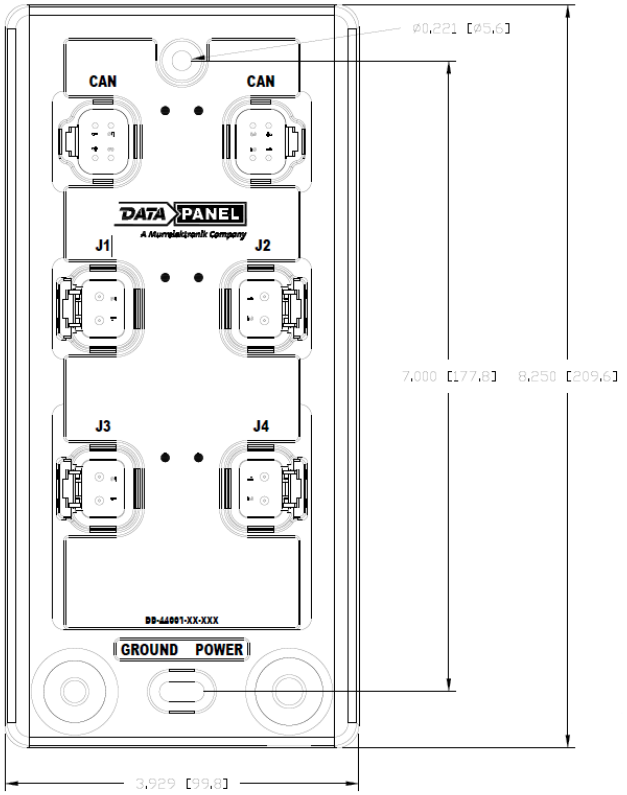

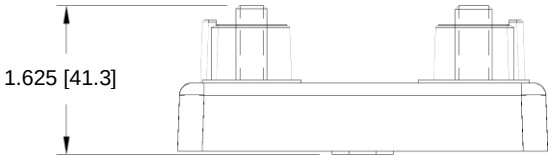

H-Bridge CAN Control and Operation Message Summary		
Description	Function	PGN
H-Bridge Control 1	Output Control	0x9D(SA*)
CTRL1 COMMAND	Module Configuration	0xEF(SA)

**SA: Module Source Address*

Diagnostics and Status Message Summary		
Description	Function	PGN
Status 1	Module Status	0xFF22
Status 2	Module Status	0xFF23
Temperature	Temperature Status	0xFF25
Device Status	Module Status	0xFF53
CTRL1 STAT	Configuration Data	0xEF(CSA*)

**CSA: Controller Source Address*

P/N Matrix	
Part No.	Description
DP-43016-4	H-Bridge Module 4 pairs

Mounting Guide	
Hole Diameter	0.221”
Suggested Bold	M5 x 1.125”
Torque	1.8…2.2 Nm / 15.9…19.5 lbf in

The fastening screws depend on the surface of the installation site. Use the screws according to the structure of the surface.

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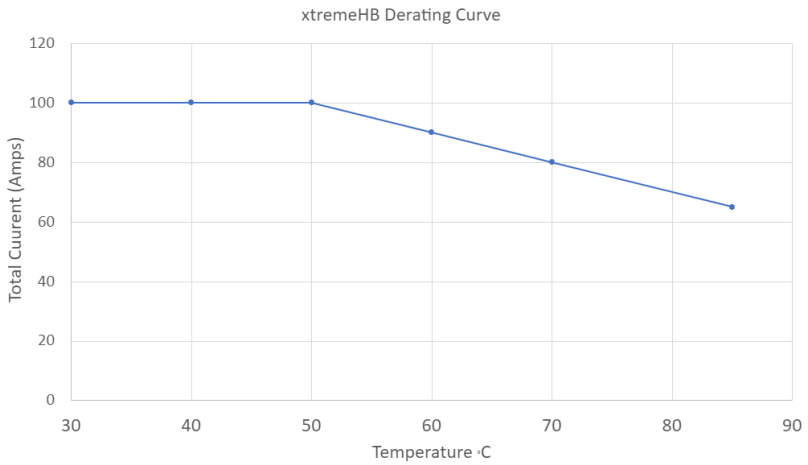
TEST SPECIFICATIONS	
Mechanical Tests	
*ISO 16750-3, Test VII**	*Commercial vehicle – sprung masses, random vibration* *Mounting location: vehicle body* *IEC 60068-2-64*
*ISO 16750-3, 4.2.2.2**	*Mechanical shock – 50g, 6ms, 10 shocks per direction* *Mounting location: vehicle body* *IEC 60068-2-27*
Environmental Tests	
ISO 16750-4, 5.3.2	*Rapid change of temperature – -40°C to 95°C, 100 cycles* *IEC 60068-2-14, Test Na*
ISO 16750-4, 5.6.6.2	*Cyclic Humidity – 55°C, 6 cycles,* *IEC 60068-2-30, Test Db*
ISO 16750-4, 5.7.2	*Steady State Humidity – 40°C, 93% RH, 21 days* *IEC 60068-2-78, Test Cab*
Chemical Tests	
*ISO 16750-5:2023**	*Chemical resistance – AA (diesel fuel), BA (engine oil), BB (differential oil), BC (transmission fluid), BD (hydraulic fluid), BE (greases), CC (antifreeze fluid), DB (vehicle washing chemicals), DE (wheel cleaner)*
Electrical Tests	
ISO 13766-1:2018	*Radiated Immunity*
ISO 13766-1:2018	*Radiated Emissions*
*ISO 16750-2:2023**	*Electrical tests*
ISO 13766-1:2018 *ISO 13766-2:2018*	*Conducted Transients*
ISO 13766-1:2018 *ISO 13766-2:2018*	*ESD*

* *Pending Final Testing*

Derating Curve Max Total Current



Rev	Description	Date	Name	12 Month Warranty		Page	3 of 3
				DATA PANEL		Date	Name
					Originator	09.12.24	DR
b	Revised “CAN Power” to be “Logic Power”	09.12.24	DR	A Murrelektronik Company	Approved		
a	DCN G162 - Initial release	08.30.24	AH	DP-43016-4_db_e_b.docx			

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