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# FLXtreme SPACE SAVING & MODULAR



NEU!

DATA PANEL GmbH

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# CONFIGURABLE FIELDBUS MODULES – AS INDIVIDUAL AS YOUR MACHINE

Increasingly, mobile machines require greater design flexibility, especially within the electronic architecture. To meet this need, DATA PANEL has developed the FLXtreme fieldbus family - a line of customizable distribution boxes for mobile equipment that give you the freedom you need in the design, assembly and subsequent expansion of machine electronics.

### LIMITED CABLE HARNESS

When you are trying to **offer options on your vehicle** - for example different body styles - or retrofit existing vehicles, the cable harness quickly becomes the second-best solution. This classic wiring technology is not designed for individualization without increasing expenditures dramatically.

Additionally, you can achieve a higher degree of automation with a more extensive wiring system.

At a certain point, the wiring harness becomes a challenge not only for the planners but also for production. Terminal boxes are typically not a great alternative as they require a lot of installation space and wiring work, and they can create a host of other problems.



### **OUR SOLUTION**

The problems created by the cable harness can be remedied by fieldbus modules that work with and **expand the wire harness modularly**. Fieldbus modules enable you to create a customizable, decentralized system architecture that meets the need for option management in machine design and production while noticeably reducing the number of individual strands and the diameter of the harness.

DATA PANEL takes this idea one step further. The FLXtreme modules adapt to the needs of machine manufacturers and operators. The signal form, the number of inputs and outputs, and even their connection technology can be customized. FLXtreme saves installation space and lowers costs while offering more flexibility in both design and production.

**FLXtreme standardizes option management and professionalizes wiring**. With all-pole disconnection of the actuator supply voltage, FLXtreme offers passively safe digital / PWMi outputs up to PL d according to ISO 13849-1.

The slim modules allow the system architecture to be **compact and as individual** as the vehicle or special machine requires. In combination with a powerful display control, smaller machines can often be completely automated with FLXtreme.

#### INDIVIDUALLY CONFIGURABLE

The FLXtreme series is designed for the **SAE J1939** and **CANopen** protocols. However, they **can be adapted to the respective environment**, e.g. to implement an Ethernet fieldbus connection or other IO signals in the future. To meet this goal, the fieldbus housing can be equipped with DT, M12 or other commercially available ports.

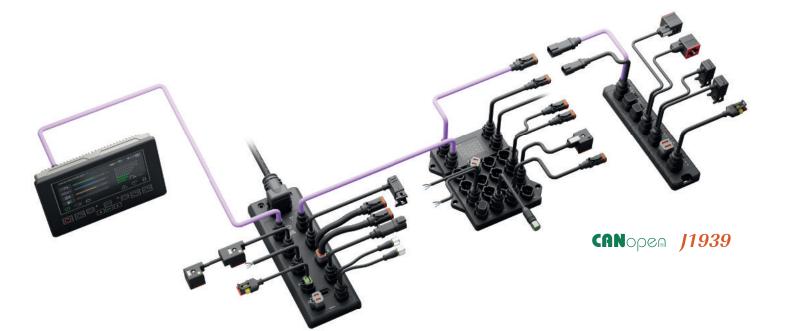
FLXtreme modules are **fully potted** and IP68 and IP69K rated. The material ensures maximum protection against environment forces like direct sunlight, vibration or aggressive media just to name a few.

#### EASY HANDLING

DATA PANEL relies on fully tested components an **mechanical coding options** for the DT ports and connection cables.

This plug-and-play system reduces errors and speeds up installation. It is virtually impossible to assemble incorrectly. Configuration can be done via the controller or by a flash drive. Addressing can be done with molded jumper plugs or by software. The modules are ready to use as soon as they are plugged in.

Status LEDs on the module show operating states at a glance - errors are found instead of searched for. Comprehensive module diagnostics are also available via the CAN interface.





Robust, high-quality and tested wiring solutions

#### **ONE-STOP-SHOP**

DATA PANEL supports machine builders by offering planning support and **comprehensive service** for IO wiring solutions in mobile machinery.

This means you have one contact - a partner who provides competent and holistic support. An OEM can now concentrate on his core business: the design and production of innovative, operator-friendly machines.



#### Top view FLXtreme

#### **FEATURES**

Property	Value	Property	Value
Dimensions L x W x D	249 x 58 x 34 mm	Baud rate	125, 250, 500 kbit/s
Weight	350 g	Digital Inputs	PNP / NPN configurable
Housing Material	Polyamid (PA), reinforced	Analog Inputs	0 20 mA / 0 32 V / 12 bit Resolution
Contact	Solid, nickel plated	Digital Outputs	3 A
Connection Ports	Hybrid   Inputs AT / DT-6P Config.   Outputs AT / DT-4P	PWMi Outputs	3 A / 40 400 Hz
Operating Voltage	8 32 V DC	Protection Class	IP68 / IP69K with MDC connection cables
Operating current per potential / sum current	max. 13 A / max. 26 A	Ambient Temperature Range	-40°C +85°C
Module diagnosis	Low voltage / Overvoltage / Over- temperature / Overload / Short circuit	Vibration and Shock Resistance	ISO 16750-3
CAN Protocols	CANopen / SAE J1939 / CAN Layer 2.0B	EMC	ISO 13766 / ECE R10 (E1) Approval in preparation

# HAVE YOU MET OUR OTHER INNOVATIVE PRODUCTS?



XTREMEBLOCK – MAKE 1 OUT OF 2 CANopen, 14 inputs and 12 outputs in the smallest footprint www.data-panel.eu/en/dp-81000-1-200



XTREMEDB – MAXIMUM FLEXIBEL CANopen / J1939, up to 16 in- or output signals, PVE Support. www.data-panel.eu/en/can-io-module/



DISPLAY CONTROL Powerful display controls, Codesys 3.5 VISU, Ready for xtreme. www.data-panel.eu/en/displaycontrol/



#### CONNECTORS – FROM A TO Z

High quality overmolded connection cables and connectors www.data-panel.eu/en/products/ cables-and-cordsets/