

8 DIO 010

Digital I/O Board



Features and Functions

- 8 short-circuit-proof analog coupling lines
- Continuously monitored digital interface
- Adjustable AF level at the analog side
- Configurable 2-wire or 4-wire AF interface
- Digital and analog side physically separated
- Potential-free relay contact

The digital I/O board 8 DIO 010 realizes the connection of the INDUSTRONIC communication and public address system with digital interfaces to all kinds of analog systems and devices. There are two potentiometers at the analog side to adjust the AF levels between two systems.

Galvanic isolation between the digital and analog side ensures that there are no cross currents between the two systems. With an optional weather-proof housing the 8 DIO 110 board may also be used outdoors.

Mechanical Data

• Front plate (8 DIO 010/011)	3 RU, 6 HP
• Housing (for 8 DIO 110 only)	180 mm x 180 mm x 91 mm (7" x 7" x 3.6")
• Cable glands (for 8 DIO 110 only)	2 x M20 x 1.5
• Weight 8 DIO 010/011	Approx. 0.3 kg (approx. 0.66 lbs)
• Weight 8 DIO 110	Approx. 0.4 kg (approx. 0.88 lbs)

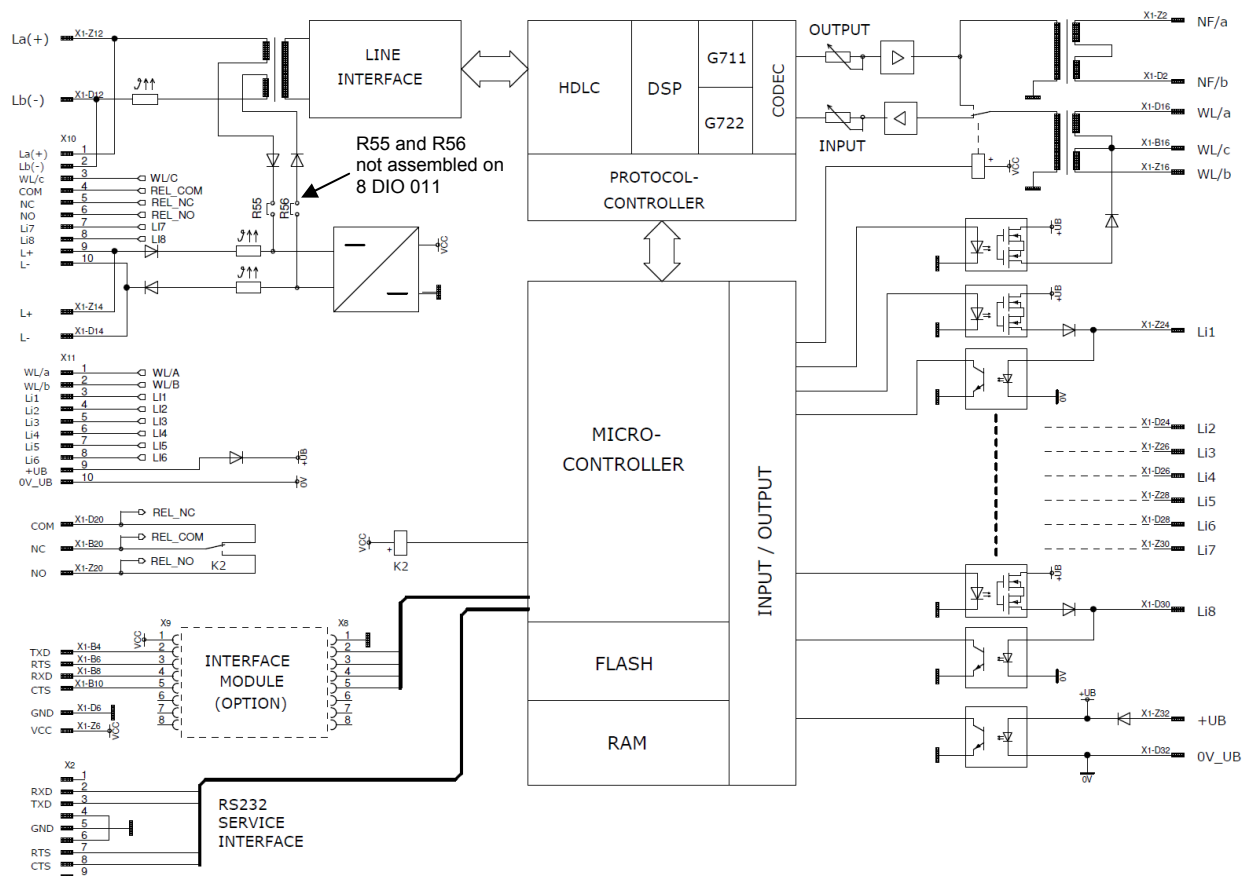


Figure 1: Block diagram 8 DIO x1x

Electrical Data

• Operating voltage range	42 VDC to 72 VDC
• Quiescent and max. current consumption	30 mA, 70 mA
• Frequency range	200 Hz to 7200 Hz (+/-3 dB)
• AF input voltage	Min. 0.7 V _{SS} to max. 7 V _{SS}
• Input impedance	2000 Ohms
• Recommended output impedance of the analog counterpart	<1000 Ohms
• AF output voltage 1 (NF a/b)	Adjustable: 0.8 V _{SS} to 9 V _{SS}
• Output impedance 1	75 Ohms
• AF output voltage 2 (WL a/b)	Adjustable: 0.4 V _{SS} to 4.5 V _{SS}
• Output impedance 2	150 Ohms
• Number of lines	8
• Max. current per line	200 mA
• Max. current via central tapping of AF transformer	350 mA
• Input voltage lines on	30 VDC to 72 VDC
• Relay contact	60 VDC / 30 VAC, 0.5 A, 20 W

Environmental Requirements and Standards

• Ambient temperature during operation	-20 °C to +50 °C (-4 °F to +122 °F)
• Humidity	Max. 95 %
• Degree of protection housing (for 8 DIO 110 only)	IP65
• EMC	IEC / EN 61000-6-2 IEC / EN 61000-6-4

Order Data

Type	Type Number
8 DIO 010 – 19" plug-in board with 30 mm aluminum front plate and F48 connector	301-435-500
8 DIO 011 – 19" plug-in board with 30 mm aluminum front plate and F48 connector, galvanically isolated La/Lb	301-435-900
8 DIO 110 – I/O board in weather-proof housing with pluggable screw terminals	301-435-600

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