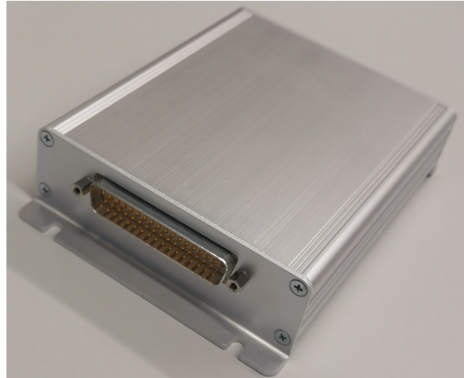


KMI110 Remote I/O Controller

Technical Data Sheet



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Description

The KMI110 Remote I/O controller is a data concentrator featuring discrete and analog inputs and outputs, PWM outputs and relays accessible through either CAN or RS485 interface.

The I/O can be configured through the Arduino IDE software.

The KMI110 meets aviation standards and requirements and is delivered with an EASA Form 1.

The applicable STC can be provided by Kuerzi specifically for your aircraft type.

Features

- 8 Discrete Inputs
- 2 Analog Inputs
- 2 Relay
- I2C Expansion Header
- 8 Discrete or PWM Outputs
- 2 Analog Outputs
- CAN & 2x RS485 Interface
- Enclosed in robust aluminium casing

Application example

The KMI110 can be installed in cabins of civil aircraft to easily control lights and temperature.

On your request the KMI110 can be altered or adapted to your requirements.

Technical Specifications

Nominal Operating Input Voltage	28.00 V
Max Operating Voltage	30.3 VDC
Min Operating Temperature	-15°C
Max Operating Temperature	+55°C
Nominal Operating Input Power	1.20 W

Environmental Specifications according DO-160 / ED-14

Temperature and Altitude	DO-160G Cat. A1
Operational Shock and Crash Safety	DO-160G Cat. B type 2 R
Vibration	DO-160G Cat. S
Magnetic Effect	DO-160G Cat. A
Power Input	DO-160G Cat. A
Voltage Spike	DO-160G Cat. B
Emission of Radio Frequency Energy	DO-160G Cat. M
Electrostatic Discharge	DO-160G Cat. A
Fire, Flammability	DO-160G Cat. C

Interface

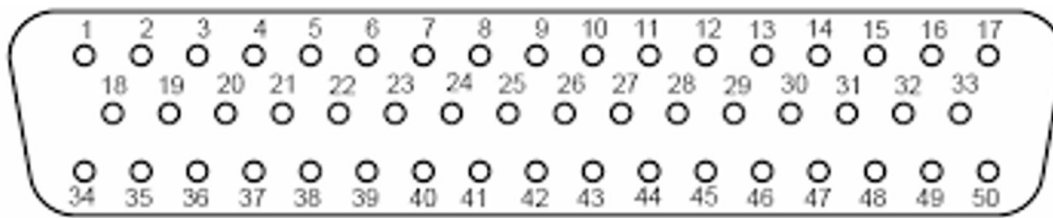


Figure 1 – Interface connector - front view

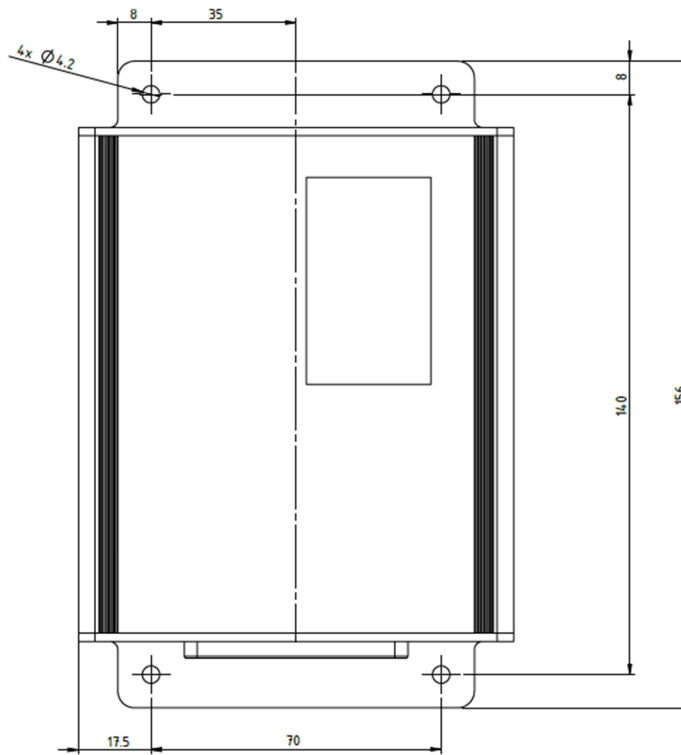
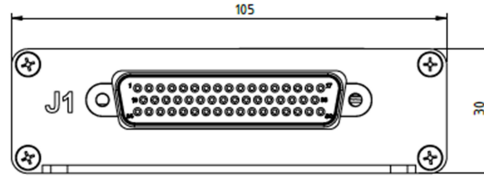
Pin	Signal	Type	Pin	Signal	Type	Pin	Signal	Type
1	28V Power Input	Power	18	Relay 1 Common	I/O	34	28V Power Return	Power
2	Relay 1 NO	I/O	19	Relay 2 Common	I/O	35	Relay 1 NC	I/O
3	Relay 2 NO	I/O	20	Discrete Out 3	Output	36	Relay 2 NC	I/O
4	Discrete Out 7	Output	21	Discrete Out 5	Output	37	Discrete Out Return	Signal Return
5	Discrete Out 2	Output	22	Discrete Out 4	Output	38	Discrete Out 8	Output
6	Discrete Out 6	Output	23	Discrete Out 1	Output	39	Discrete Out Return	Signal Return
7	Discrete Input 2	Input	24	Discrete Input 3	Input	40	Discrete Input 1	Input
8	Discrete Input 4	Input	25	Discrete Input 5	Input	41	Discrete Input 7	Input
9	Discrete Input 6	Input	26	RS485 1 A	I/O	42	Discrete Input 8	Input
10	RS485 1 B	I/O	27	RS485 2 A	I/O	43	Discrete Input Return	Signal Return
11	RS485 2 B	I/O	28	CAN Low	I/O	44	RS485 Common	Signal Return
12	CAN High	I/O	29	Analog Voltage Input N	Input	45	Reserved	Input
13	Analog Voltage Input P	Input	30	Analog Current Input P	Input	46	Analog output Return	Signal Return
14	Analog Current Input N	Input	31	Analog Voltage Output 2	Input	47	Current Input Common	Signal Return
15	Analog Voltage Output 1	Output	32	Spare	-	48	Spare	-
16	Expansion Header 2	Output	33	Expansion Header 3	Input	49	Spare	-
17	Expansion Header 1	Input	-	-	-	50	Spare	-

Mechanical Dimensions

Weight of the unit 250.00 Gr

Weight of the unit including required installation materials (w/o wiring) 300.00 Gr

All dimensions [mm]



Configuration / Ordering Data

Part Number	Type	Description
2210360-1	KMI110	KMI110 Remote I/O Controller