

## Digital Input Expansion Module IKD-IN-16

## Datasheet



### Applications

The IKD-IN-16 is a smart solution to increase number of digital inputs on Kuhse KEA 300 controllers or to use it as a remote input module in a distributed application. It is possible to connect one or more IKD-IN-16 modules (see table Related Products below).

The IKD-IN-16 input status are transferred over the CAN bus to the KEA 300 controller. Configuration of each input such as name, alarm class, NO/NC configuration, and time delay is performed in the main controller. The name and class are displayed on the connected genset controller's display. It requires no configuration tool as few parameters such as module address and CAN baud rate can be setup by onboard DIP switches.

- 16 configurable digital inputs
- plug-n-play connection with Kuhse KEA 300 series controls
- easy integration
- compact remote I/O with IKD-OUT-16
- Shorter lead time
- Configuration via Toolkit Software, no extra configuration tool needed
- for 12/24VDC applications

### Description

#### Features

- 16 configurable discrete inputs
- CAN bus communication to Kuhse KEA 300 controller
- The control unit evaluates the status of these discrete inputs and depending on the configuration of the control unit takes an appropriate action
- The IKD-IN-16 can be used with other manufacturer's controllers/PLCs. Consult product manual 37953 for information regarding the CAN bus data telegram
- DIP switches to configure device module number and CAN baud rate.
- Power, CAN, and DI status LEDs

## Technical Data

Power supply	12/24 Vdc (9 to 35 Vdc)
Intrinsic consumption	max. 2 W
Reverse voltage protection	yes
Ambient temperature (operation)	-25 to 70 °C / -13 to 158 °F
Ambient temperature (storage)	-30 to 80 °C / -22 to 176 °F
Ambient humidity	93 %, non-condensing
Discrete inputs	Non-isolated
Input range	12/24 VDC (0 to 60 VDC)
Common terminal	connected to battery minus (B-)
CAN interface	isolated
Insulation voltage (continuously)	2500 Vdc
Version	CAN bus
Internal line termination	yes (terminals 5,6)
Housing	
DIN-rail mounting	Plastic housing
Dimensions WxHxD	107.6 × 89.7 × 60.7 mm
Connection	Screw-plug-terminals 2.5 mm <sup>2</sup>
Weight	approx. 250 g
Protection system	IP20
Disturbance test (CE)	tested according to applicable IEC standards
Listings	CE, UKCA, UL(Pending)

### Supported Products

	max. # of IKD-IN-16
• KEA 320 Lite / KEA 320 RP Lite	2
• KEA 320 / KEA 320 RP	2
• KEA 350 P1 / KEA 350 RP P1	2
• KEA 350 P2 / KEA 350 RP P2	2
• DTSC-200A	1

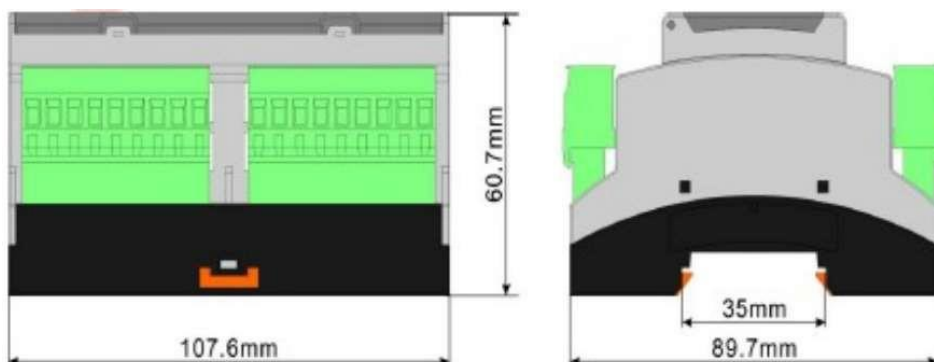
### Product Number P/N

- 2RIKD16DI0

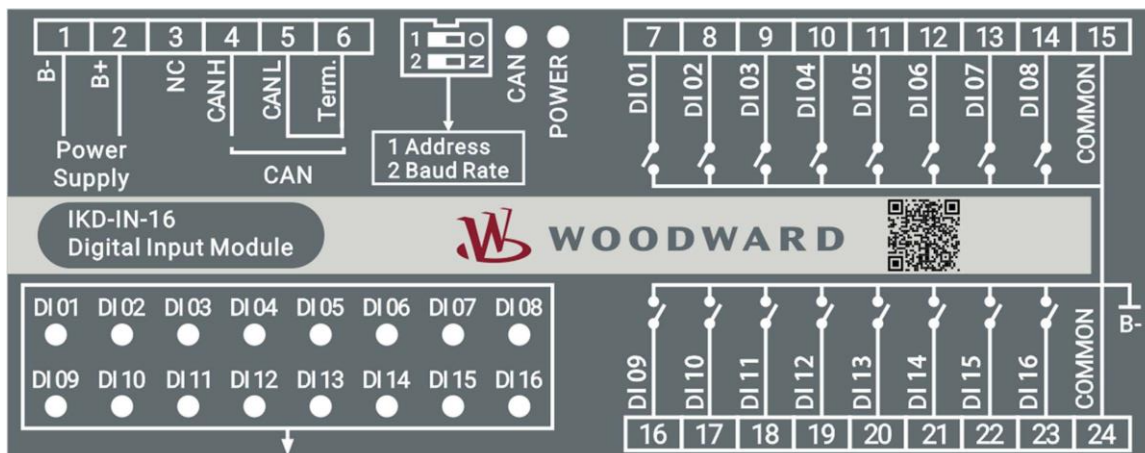
### Related Products

- 2RIKD16DO0 | Digital output expansion module IKD-OUT-16
- 2RIKD1M000 | Digital I/O expansion module IKD 1

## Dimensions



## Wiring diagram



## Typical applications

The digital inputs are read by the IKD-IN-16 and transferred via the CAN bus to the KEA 300 control unit (incl. alarm class). Each alarm input may have a delay as well as the control logic (NO/NC) configured individually during set up. The status of the alarm input is monitored in the KEA 300 controller and will show the alarm text in its display. The alarm class assigned in the control device evaluates the alarm input and reacts accordingly. If a discrete input on the IKD-IN-16 is enabled, the control device displays a text message, and the control functions of the alarm class are executed (refer to according manual of the supported control devices).

