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#### IKD-IN-16



# **Digital Input Expansion Module**

### DESCRIPTION

The IKD-IN-16 is a smart solution to increase number of digital inputs to Woodward power management controllers or apply it as a remote input module in your PLC based control system. 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 a higher-level 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.

### **FEATURES**

- 16 configurable discrete inputs
- CAN bus communication to the higher-level 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

### **Ordering Part Number**

8440-2304

# Product Specification 37955

## IKD-IN-16 Unique Features

- ✓ 16 configurable digital inputs
- plug-n-play connection with Woodward power management controls
- easy integration with PLC
- ✓ compact remote I/O with IKD-OUT-16
- Shorter lead time

- Flexible remote input module. Works with
  - Woodward power management controls
  - PLC
- 16 discrete inputs
- Requires no
  configuration tool
- CAN bus communication
- CE/UKCA marked
- UL/cUL pending



### SPECIFICATIONS

Power supply	
Intrinsic consumption	max. 2 Ŵ
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	
Discrete inputs	non-isolated
Input range	
Common terminal	connected to battery minus (B-)

CAN Interface	isolated
Insulation voltage (continuo	us)2500 V <sub>DC</sub>
Version	
Internal line termination	
	, (, , , , , , , , , , , , , , , , , ,
Housing DIN-rail mounting.	Plastic housing
Dimensions WxHxE	0
Connection	screw-plug-terminals 2.5 mm <sup>2</sup>
Protection system	IP20
Weight	approx. 250 g
Disturbance test (CE)	tested according to applicable IEC standards
Listings	

### DIMENSIONS



### **TERMINAL DIAGRAM**



### **RELATED PRODUCTS**

Supported power management controls

Max. # of IKD-IN-16

- easYgen-3000XT (GC-3400XTP1) 2(1)
- easYgen-3400/3500P1 and -3100/3200P2 2 1
- easYgen-3400/3500P2 and -3100/3200P1
  - easYgen-2000 1
  - easYgen-1500/1700/1800 1
    - easYgen-800 1
    - DTSC-200 and -200A
- Digital input expansion module IKD-OUT-16 (Product spec #37954): P/N 8440-2305

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Digital I/O expansion module IKD 1 (Product spec #37171): P/N: 8440-2116

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### TYPICAL APPLICATION

#### WOODWARD

#### CONTACT

North & Central America Tel.: +1 (208) 278 3370

South America Tel.: +55 19 3708 4800

**Europe** Tel.: +49 711 78954 510

Middle East & Africa Tel.: +971 2 678 4424

Russia Tel.: +49 711 78954 515

China Tel.: +86 512 8818 5515

India Tel.: +91 124 4399 500

ASEAN & Oceania Tel.: +49 711 78954 510

SALES SUPPORT

industrial.sales PG@woodward.com

#### **TECHNICAL SUPPORT**

industrial.support@woodward.com

#### www.woodward.com

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The digital inputs are read by the IKD-IN-16 and transferred via the CAN bus to the control unit (incl. alarm class). Each alarm input may have a delay as well as the control logic (NO/NC) configured individ-ually during set up. The status of the alarm input is monitored in the control device 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).

→ Product documentation site, <a href="http://wwdmanuals.com/ikd-in-16">http://wwdmanuals.com/ikd-in-16</a>