

## Technical data I/O-cards

Description:		Part No.:
AD8	8-fold-analog input card (max. 64 inputs)	601613
DA8	8-fold-analog output card (resolution 12 Bit)	601615
AD 4/DA 2	4-fold IN/2-fold OUT analog combi	601614
AD 4/DA 2	4-fold IN/2-fold OUT analog combi (with comparator)	601616
IN 32	32-fold-digital input card	601611
OUT 32	32-fold-digital output card (Transistor)	601612
IN24 /OUT 16	24-fold-digital IN / 16-fold-digital OUT card (Transistor)	601608

### AD8: 8-fold analog input card (Part number: 601613):

- Each input electrically isolated from the other and from the system potential
- DC measuring possible
- Inputs configurable: 0...100mV 0...500mV
- 0...2V 0...10V
- 0...20mA
- 0...400Ω (2/3/4-wire technique)
- Error < 0.1% from measuring range
- Free combination of input types
- Min. measurement duration per channel 20ms
- Double coldjunction temperature measurement in connector

For the following thermocouples a linearization is included:

- Cu-CuNi Typ U ( -200 ... +600 °C)
- Fe-CuNi Typ L ( -200 ... +900 °C)
- NiCr-CuNi Typ E ( 0 ... +1000 °C)
- Ni-CrNi Typ K ( -200 ... +1370 °C)
- PtRh-AuPdPt ( -100 ... +1300 °C)
- PtRh13-Pt Typ R ( 0 ... +1740 °C)
- PtRh10-Pt Typ S ( 0 ... +1760 °C)
- PtRh30-PtRh6 Typ B ( 0 ... +1800 °C)
- WRe3-WRe25 ( 0 ... +2400 °C)
- WRe3-WRe26 ( 0 ... +2500 °C)
- NiCrSi-NiSi Typ N ( -270 ... +1400 °C)
- and Pt 100 ( -200 ... +800 °C)

### DA8: 8-fold analog output card (Part number: 601615):

- All outputs are electrically isolated from the system potential
- Outputs: 0...10V load  $\geq$  1k Ω
- 0(4)...20mA burden  $\leq$  1000 Ω
- Resolution 12 Bit / 0,025%
- Output rate depending on configuration (min. every 100ms)
- Local watchdog function integrated

**AD4/DA2: analog combi car (Part number: 601614):**

Analog inputs (4):

- Each input electrically isolated from the other and from the system potential
- DC measuring possible
- Inputs configurable: 0...100mV 0...500mV
- 0...2V 0...10V
- 0...20mA
- 0...400  $\Omega$  (2/3/4-wire technique)
- Error < 0.1% from measuring range
- Free combination of input types
- Min. measurement duration per channel 20ms
- Coldjunction temperature measurement in connector

For the following thermocouples a linearization is included:

- Cu-CuNi Typ U ( -200 ... +600 °C)
- Fe-CuNi Typ L ( -200 ... +900 °C)
- NiCr-CuNi Typ E ( 0 ... +1000 °C)
- Ni-CrNi Typ K ( -200 ... +1370 °C)
- PtRh-AuPdPt ( -100 ... +1300 °C)
- PtRh13-Pt Typ R ( 0 ... +1740 °C)
- PtRh10-Pt Typ S ( 0 ... +1760 °C)
- PtRh30-PtRh6 Typ B ( 0 ... +1800 °C)
- WRe3-WRe25 ( 0 ... +2400 °C)
- WRe3-WRe26 ( 0 ... +2500 °C)
- NiCrSi-NiSi Typ N ( -270 ... +1400 °C)
- and Pt 100 ( -200 ... +800 °C)

Analog outputs (2):

- All outputs are electrically isolated from the system potential
- Outputs: 0...10V load  $\geq$  1k  $\Omega$
- 0(4)...20mA burden  $\leq$  500  $\Omega$
- Resolution 12 Bit/0.025%
- Output rate depending on configuration (min. every 100ms)
- Local watchdog function integrated

**AD4/DA2: 4-fold analog input/2-fold analog output card with comparator (Part number: 601616):**

Analog inputs (4):

- Each input electrically isolated from the other and from the system potential
- DC measuring possible
- Inputs configurable: 0...100mV 0...500mV
- 0...2V 0...10V
- 0...20mA
- 0... 400  $\Omega$  (2/3/4-wire technique)
- error < 0.1% from measuring range
- Free combination of input types
- Min. measurement duration per channel 20ms
- Coldjunction temperature measurement in connector

For the following thermocouples a linearization is included:

- Cu-CuNi Typ U ( -200 ... +600 °C)
- Fe-CuNi Typ L ( -200 ... +900 °C)
- NiCr-CuNi Typ E ( 0 ... +1000 °C)
- Ni-CrNi Typ K ( -200 ... +1370 °C)
- PtRh-AuPdPt ( -100 ... +1300 °C)
- PtRh13-Pt Typ R ( 0 ... +1740 °C)
- PtRh10-Pt Typ S ( 0 ... +1760 °C)
- PtRh30-PtRh6 Typ B ( 0 ... +1800 °C)
- WRe3-WRe25 ( 0 ... +2400 °C)
- WRe3-WRe26 ( 0 ... +2500 °C)
- NiCrSi-NiSi Typ N ( -270 ... +1400 °C)
- and Pt 100 ( -200 ... +800 °C)

Analog outputs (2):

- All outputs are electrically isolated from the system potential
- Outputs: 0...10V load  $\geq 1\text{ k}\Omega$
- 0(4)...20mA burden  $\leq 500\ \Omega$
- Resolution 12 Bit/0.025%
- Output rate depending on configuration (min. every 100ms)
- Local watchdog function integrated

Comparator inputs (2):

- The both inputs 0...10V are positioned on the potential of the analog outputs and they are compared with each other.
- Relay isolated comparator output.

**IN32: 32-fold digital input card (Part number: 601611):**

- All inputs electrically isolated by optocoupler from system potential
- Input potentials 12...30V (DC), low signal  $0 < 6\text{V}$ , high signal  $1 > 10\text{V}$
- Hardware debouncing of each input, signal 1,6ms/0,14ms (lower signal possible)

**OUT32: 32-fold digital output card (Part number: 601612):**

- All outputs electrically isolated by optocoupler from system potential
- Relay contacts load max. 30V / max. 0,5A / max. 12W (ohmic load)
- External voltage supply of the output relays 24V DC  $\pm 15\%$
- Local watchdog function integrated

**IN24/OUT16: 24-fold IN/16-fold OUT card (Part number 601608)**

- All inputs electrically isolated by optocoupler from system potential
- Input potentials 0 V...30V (DC) 15mA; low signal  $< 6\text{V}$ , high signal  $> 10\text{V}$
- Hardware debouncing of each input, min. Signal 200ms (lower signal possible)
- 16 outputs with nominal load for each 0,5A (All outputs may be switched at the same time)
- Outputs are short circuit protected
- Electric current supply 18VDC.36VDC
- Local watchdog function integrated
- Outputs switched off when supply  $< 16\text{V}$

**Contact:**

demig Prozessautomatisierung GmbH – Haardtstr. 40 – D-57076 Siegen  
Phone: +49 271 772020      E-Mail: info@demig.de

Subject to change!