

# Receiver for Digital Signals Type GAD 1500



- 8-channel receiver
- NPN transistor outputs (sink)
- Load: 8 x 100 mA/30 VDC
- D-housing
- Plug-in type module
- LED-indications for supply and Dupline® carrier
- DC power supply
- Channel coding by GAP 1605

## Product Description

Dupline® receiver. Open collector NPN transistor outputs for control of 8 DC loads or devices with NPN inputs, e.g. PLC.

## Ordering Key

**GAD 1500 700**

Type: Dupline®  
No. of channels  
Output type  
Power supply

## Type Selection

Supply	Ordering no. 8 channels 100 mA/10 to 30 VDC
10 to 30 VDC	<b>GAD 1500 700</b>

## Supply Specifications

<b>Power supply</b>	Overvoltage cat. III (IEC 60664) (V <sub>DD</sub> in )
Rated operational voltage through pins 3 & 9	700
Ripple	10 to 30 VDC (ripple included)
Reverse polarity protection	≤ 3 V
Rated operational current	Yes
Inrush current	≤ 20 mA
Rated impulse withstand voltage	≤ 1 A
Dielectric voltage	800 V
Supply - Dupline®	None
Supply - Outputs	None

## Output Specifications

<b>Outputs</b>	8, NPN transistors
Isolated in groups of	1 x 8
Output voltage range	10 to 30 VDC
Reverse-polarity protection	None
Current per output	≤ 100 mA
Total load capability	100%
Short-circuit protection	None
Built-in protective diodes	Yes
Off-state leakage current	≤ 100 µA
Output voltage drop	≤ 1.2 V
Dielectric voltage	None
Outputs - Dupline®	None
<b>Response time</b>	1 pulse train

## General Specifications

<b>Output OFF delay</b> upon loss of Dupline® carrier	≤ 20 ms
<b>Power ON delay</b>	Typ. 2 s
<b>Indication for</b> Supply ON Dupline carrier	LED, green LED, yellow
<b>Environment</b> Degree of protection Pollution degree Operating temperature Storage temperature	IP 20 3 (IEC 60664) -20° to +50°C (-4° to +122°F) -50° to +85°C (-58° to +185°F)
<b>Humidity</b> (non-condensing)	20 to 80%
<b>Mechanical resistance</b> Shock Vibration	15 G (11 ms) 2 G (6 to 55 Hz)
<b>Dimensions</b> <b>Material</b> (see Technical information)	D-housing
<b>Weight</b>	125 g

## Mode of Operation

8-channel receiver with 8 NPN transistor outputs with open collector.

Each output may be coded individually by means of the code programmer GAP 1605. For details, please refer to the respective data sheet.

The outputs are normally off. Output 1 (pin 4) turns on when a transmitter coded to the channel for output 1 is activated.

Output 2 (pin 1) turns on when the channel allocated to output 2 is activated.

The outputs do not change their status before having received an activated/non-activated channel for two consecutive pulse trains.

The default setting of the module is such that upon loss of Dupline® carrier **all** outputs turn off.

**Notes:**

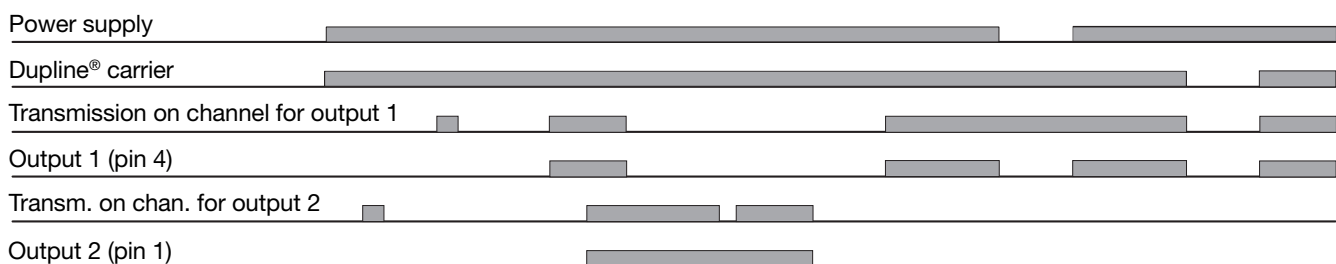
- The length of the DC supply-bus must not exceed 3 m in order to avoid disturbances unbalancing the Dupline.
- The common (pin 3) must never be connected to protective ground or earth.

### Pin allocation:

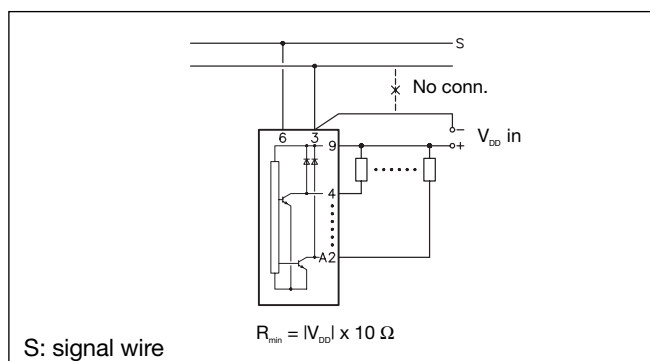
## Output connections

Output 1: pins 3 & 4  
Output 2: pins 3 & 1  
Output 3: pins 3 & 5  
Output 4: pins 3 & 2  
Output 5: pins 3 & 7  
Output 6: pins 3 & A1  
Output 7: pins 3 & 8  
Output 8: pins 3 & A2

## Operation Diagram



## Wiring Diagram



## Accessories

Socket ◇	D 411
Socket cover	BB 5
Hold down spring ◇	HF
Front mounting bezel	FRS 3
DIN-rail for D 411	FMD 411

For further information see "Accessories".