# Receiver with Demultiplex Output Type D 1230 5111





- 8-channel receiver
- 8:1 demultiplex function
- 2 NPN transistor outputs
- Enable and disable output operation
- D-housing

Supply

- Plug-in type module
- LED-indications for supply and output
- AC or DC power supply

#### **Product Description**

Dupline® receiver with demultiplex output (8:1) for multiplex transmission on Dupline® channels. Applicable for transmitters with frequency input

(type FFD 1680, SPEC 918). Increases the transmission capacity of a Dupline® system to max. 3825 x 8-bit measured values.

# Ordering Key Type: Dupline® D-housing Receiver No. of channels Output type

#### **Type Selection**

Supply	Ordering no. 8 channels 2 x 10 V/10 mA
24 VAC 120 VAC 220 VAC	D 1230 5111 024 D 1230 5111 120 D 1230 5111 220
12 VDC	D 1230 5111 712

**Code Module:** No code module required. D 1230 5111 automatically uses the highest available channel group of the Dupline® installation.

## **Output Specifications**

Outputs	1 NPN transistor (enable)	1 NPN transistor (disable)
Output voltage V <sub>BB</sub> Reverse polarity	10 VDC	10 VDC
protection	Yes	Yes
Current per output	≤ 2.5 mA	≤ 2.5 mA
Total load capability	100%	100%
Short-circuit protection	None	None
Built-in protective diodes	None	None
Off-state leakage current	≤ 100 µA	≤ 100 µA
Output voltage drop	≤ 1.2 V	≤ 1.2 V
Cable length	≤ 3 m	≤ 3 m
Dielectric voltage		
Output - Dupline®	≥ 2 kVAC (rms)	None
Response time	< 1 pulse train	< 1 pulse train

### **Supply Specifications**

Power supply AC types Rated operational voltage through pins A1 & A2 220 120 024 Frequency	Overvoltage cat. III (IEC 60664) 230 VAC +6%, -15% (IEC 60038) 120 VAC ± 10% (IEC 60038) 24 VAC ± 10% 45 to 65 Hz
Voltage interruption Rated operational power Rated impulse withstand	≤ 40 ms Typ. 2.5 VA
voltage 220 120 024	4 kV 2.5 kV 800 V
Dielectric voltage Supply - Dupline® Supply - Outputs	≥ 2 kVAC (rms) ≥ 2 kVAC (rms)
Alternative DC supply (V <sub>DD</sub> in) through pins 3 & 9 Reverse polarity protection Rate operational current Inrush current Rated impulse withstand voltage Dielectric voltage	12 VDC ± 10% Yes ≤ 20 mA ≤ 1 A
Supply - Dupline® Supply - Enable output Supply - Disable output	None ≥ 2 kVAC (rms) None
AC types as supply source Source voltage (VDD out) through pins 3 & 9 Source current Fan out Cable length	12 VDC ≤ 40 mA ≤ 4 modules 700 ≤ 3 m



#### **General Specifications**

Output OFF delay upon loss of Dupline® carrier	Undefined
Power ON delay	Undefined, ≤ 1 s
Indication for Supply ON Output ON (enable)	LED, green LED, red
Environment Degree of protection Pollution degree Operating temperature Storage temperature	IP 40 3 (IEC 60664) -20° to +50°C (-4° to +122°F) -50° to +85°C (-58° to +185°F)

Humidity (non-condensing)	20 to 80%
Mechanical resistance Shock Vibration	15 G (11 ms) 2 G (6 to 55 Hz)
Dimensions Material (see "Technical Information")	D - Housing
Weight AC types DC types	200 g 125 g

## **Mode of Operation**

8-channel receiver with demultiplexed outputs for enable and disable functions.

The receiver continuously receives the status of 8 channels on the highest channel group of a Dupline® installation (e.g. channel group P if 128 channels are selected on the channel generator). The status of these 8 channels is compared with the address selected by the DIP switch selector inside the D 1230 5111. As soon as the trans-

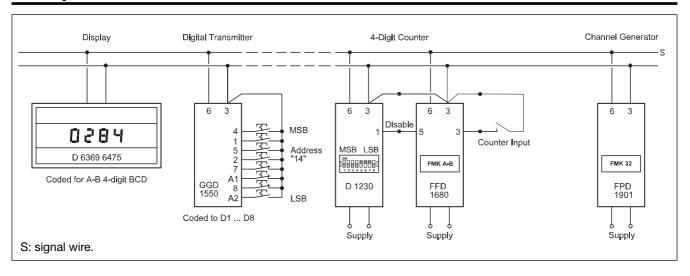
mitted channel status is equal to the selected address, the two outputs change state (enable output turns on and disable output turns off).

This module used in connection with transmitters for analogue signals (type FFD 15..) allows the transmission of 255 individual analogue values on one channel group. The D 1230 5111 can be used for all Dupline® transmitters that have enable or disable inputs, e.g. FFD 15.., FFD 16.. or SPEC 918.

In the example given below the Dupline® installation uses 32 channels (FMK 32 of the channel generator). Therefore, the address setup of the D 1230 5111 is compared with the status of channel group D. As soon as the status of channel group D (provided by the transmitter GGD 1550) is equal to the address setup, the disable output of the D 1230 5111 turns off. This causes the FFD 1680 to transmit the counter value on channel groups A-B for display on the D6369 6475 (coded for channel groups A-B).

**Note**: If DC-supplied D 1230 5111 receivers are used, the length of the supply bus must not exceed 3 m in order to avoid disturbance unbalancing the Dupline<sup>®</sup>.

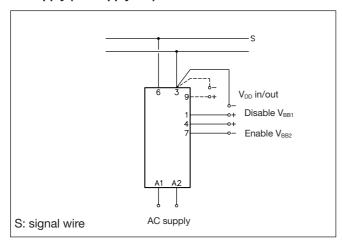
### **Example**





## **Wiring Diagrams**

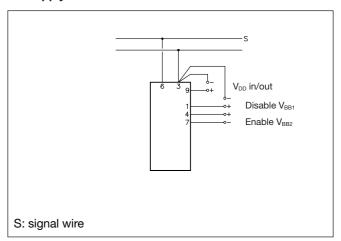
# D 1230 5111 024/120/220 AC supply (DC supply $V_{DD}$ )



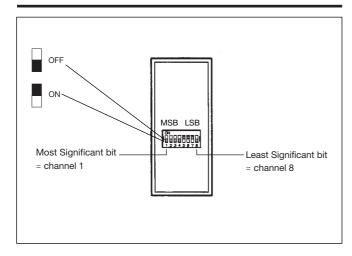
#### D 1230 5111 712 DC supply

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#### **Address Selection**



#### **Accessories**

Socket◊D 411Socket coverBB 5Hold down spring◊HFFront mounting bezelFRS 2DIN-rail for D 411FMD 411

For further information refer to "Accessories".