Dupline® Field- and Installationbus Receiver with Analog Current Output Types FAD 1530, FAD 1531, FAD 1532

- **Receivers with current signal output**
- **Current output signals:**
  FAD 1530: 1 x 0 to 1 mA
  FAD 1531: 1 x 0 to 20 mA
  FAD 1532: 1 x 4 to 20 mA
- **8-bit (8 channels) resolution**
- **For binary transmitted analogue signals**
- **Galvanically separated output**
- **D-housing**
- **Plug-in type module**
- **AC power supply**

Product Description

Dupline analog receivers with standard current output signals (0 to 1 mA, 0 to 20 mA, 4 to 20 mA). Convert binary codes into analog current signals.

Ordering Key

FAD 1530 024

Type: Dupline
Output signal
Supply

Type Selection

Supply	Ordering no. 0 to 1 mA	Ordering no. 0 to 20 mA	Ordering no. 4 to 20 mA
24 VAC	**FAD 1530 024**	**FAD 1531 024**	**FAD 1532 024**
120 VAC	**FAD 1530 120**	**FAD 1531 120**	**FAD 1532 120**
220 VAC	**FAD 1530 220**	**FAD 1531 220**	**FAD 1532 220**
Code module	**FMK A to FMK P**	**FMK A to FMK P**	**FMK A to FMK P**

Output Specifications

	FAD 1530 ...	FAD 1531 ...	FAD 1532 ...
Output	1 current output	1 current output	1 current output
Signal range	0 to 1 mA	0 to 20 mA	4 to 20 mA
Isolated in groups of	1 x 1	1 x 1	1 x 1
Output load resistance	≤ 10 kΩ	≤ 350 Ω	≤ 350 Ω
Resolution	8 bits (3.92 µA/LSB)	8 bits (78.43 µA/LSB)	8 bits (62.75 µA/LSB)
Settling time	≤ 1 pulse train + 10 ms	≤ 1 pulse train + 10 ms	≤ 1 pulse train + 10 ms
Short-circuit protection	Yes	Yes	Yes
Short-circuit current	1 mA	20 mA	20 mA
Open loop voltage	Approx. 15 V	Approx. 15 V	Approx. 15 V
Inaccuracy	≤ 1% of full scale	≤ 1% of full scale	≤ 1% of full scale
Cable length	≤ 3 m	≤ 3 m	≤ 3 m
Dielectric voltage			
Output - Dupline	≥ 200 VAC (rms)	≥ 200 VAC (rms)	≥ 200 VAC (rms)

CARLO GAVAZZI

Supply Specifications

Power supply		Overvoltage cat. III (IEC 60664)
Rated operational voltage through pins A1 & A2	220	230 VAC +6%, -15% (IEC 60038)
	120	120 VAC ± 10% (IEC 60038)
	024	24 VAC ± 10%
Frequency		45 to 65 Hz
Voltage interruption		≤ 40 ms
Rated operational power		Typ. 2.5 VA
Rated impulse withstand voltage	220	4 kV
	120	2.5 kV
	024	800 V
Dielectric voltage		
Supply - Dupline		≥ 2 kVAC (rms)
Supply - Output		≥ 2 kVAC (rms)

General Specifications

Output OFF delay upon loss of Dupline carrier	Undefined
Power ON delay	Undefined, ≤ 1 s
Environment	
Degree of protection	IP 20
Pollution degree	3 (IEC 60664)
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
Humidity (non-condensing)	20 to 80%
Mechanical resistance	
Shock	15 G (11 ms)
Vibration	2 G (6 to 55 Hz)
Dimensions	
Material (see "Technical Information")	D-housing
Weight	200 g
Approvals	CSA, UL

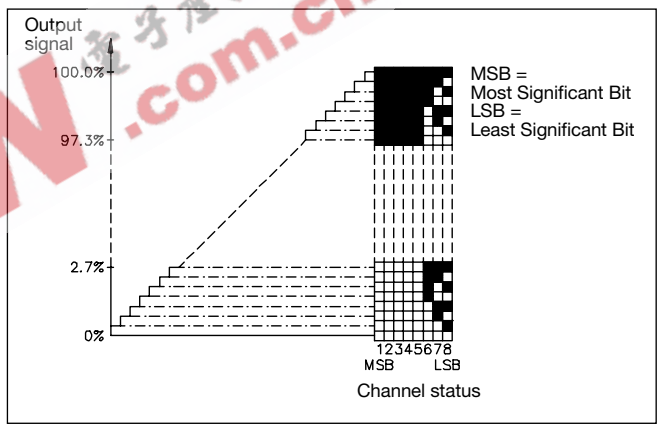
Mode of Operation

Receiver with current signal output. The binary status of an entire channel group (8 bit) is converted to a current signal. The binary status of the selected group may be generated by Dupline transmitters with analog inputs (current, voltage, temperature etc.) or by PC's.

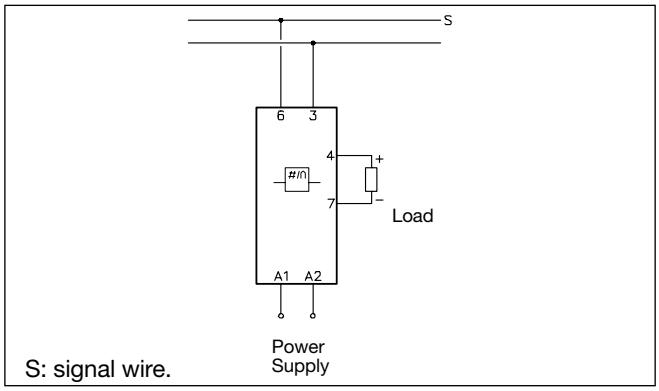
The least significant bit (influencing the output current by 0.392% of full scale) is the highest channel of the selected group (C8 if FMK C is plugged in). The most significant bit (influencing the output current by 49.8% of full scale) is the lowest channel of the selected group (C1 in the above example).

Note: Analog receivers must not be used in systems where channel generators with 2 or 3 sequences are installed.

Operation Diagram



Wiring Diagram



S: signal wire.

Accessories

Socket◊	D 411
Socket cover	BB 5
Hold down spring◊	HF
Front mounting bezel	FRS 2
DIN-rail for D 411	FMD 411

For further information refer to "Accessories".