

→ **6mm** ←

Isolation Signal Splitter D6N 21000

Conversion, Isolation and Distribution of Standard Signals

With the Isolation Signal Splitter D6N 21000 DRAGO is extending its offer on high-functional and high-reliable components of the interface technique.

The Isolation Signal Splitter D6N 21000 is used for isolation, conversion and distribution of 0/4 ... 20 mA, 0/1 ... 5 V and 0/2 ... 10 V standard signals. The input and two outputs each can be separately configured. The signal combination is selectable by DIP switch. Its high level of reliability and extremely slim form make the D6N 21000 the first choice in its class!

The Protective Separation with high isolation level provides protection for personnel and downstream devices against impermissibly high voltage and make the D6N 21000 universally applicable for all measurement and industrial applications.

Pluggable cross-connectors for the auxiliary power supply ensures fast and economical installation. The slim housing with 6.0 mm wide saves significant space on DIN-rail in the switch cabinet.

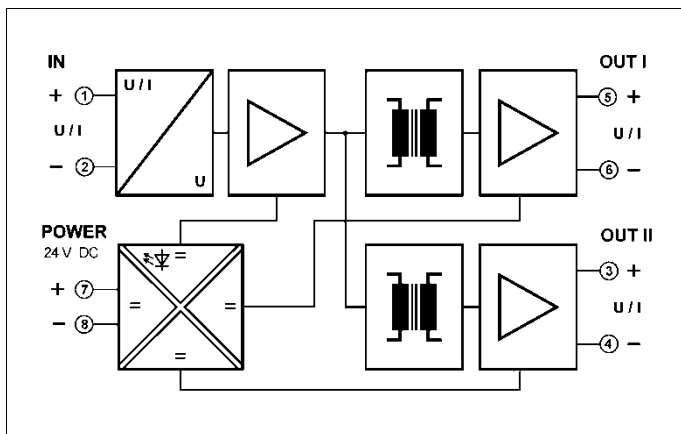
The optimized efficiency of the D6N 21000 power pack contributes significantly to reducing the units own heat generation. This is reflected in extremely high MTBF, it means highest reliability and long-term stability. A green LED on the front of the unit has been provided to monitor the power supply.

- **Calibrated signal setting**
Input and output range can be set by using DIP switch - without any further adjustment
- **4-Port isolation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Extremely slim design**
6.0 mm small housing with practical pull-spring clamps
- **Protective Separation acc. to EN 61140**
Protects service personnel and downstream devices against impermissibly high voltage
- **Maximum reliability**
No maintenance costs
- **5 Years Warranty**

5 Years Warranty
Defects occurring within 5 years from delivery are remedied free of charge at our plant (carriage and insurance paid by sender).



Block diagram





Technical Data

Input			
Input signal	0 ... 20 mA 4 ... 20 mA		see order information
	0 ... 5 V 0 ... 10 V	1 ... 5 V 2 ... 10 V	
Input resistance	Current input	≤ 50 Ω	
	Voltage input	≥ 100 kΩ	
Overload	Current input	≤ 50 mA	
	Voltage input	≤ 30 V	
Output I Output II			
Output signal	0 ... 20 mA 4 ... 20 mA		see order information
Load	≤ 10 V	(2 x 300 Ω at 20 mA)	
Offset	< 20 μA		
Ripple	< 10 mV _{rms}		
General Data			
Transmission error	< 0.1 % of final value		
Temperature coefficient ¹⁾	< 100 ppm/K		
Cut-off frequency	1 kHz	switchable to 100 Hz	
Response time (T ₁₀₋₉₀)	< 300 μs	switchable to < 3.5 ms	
Prüfspannung	2.5 kV, 50 Hz	Input against Output I against Output II against power supply	
Working voltage ²⁾ (Basic Insulation)	Up to 600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1 between all circuits.		
Protection against electrical shock	Protective separation according to EN 61140 by reinforced insulation in accordance with EN 61010-1 up to 300 V AC/DC for overvoltage category II and pollution degree 2 between all circuits.		
Ambient temperature	Operation	-25 °C to + 70 °C	(-13 to +158 °F)
	Transport and storage	-40 °C to + 85 °C	(-40 to +185 °F)
Power supply	24 V DC	16.8 ... 31.2 V DC, approx. 1.0 W	
EMC ³⁾	EN 61326-1		
Construction	6.0 mm housing, protection class: IP 20		
Weight	Approx. 50 g		

- 1) Average TC based on the final value in specified operating temperature range
- 2) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.
- 3) Minor deviations possible during interference

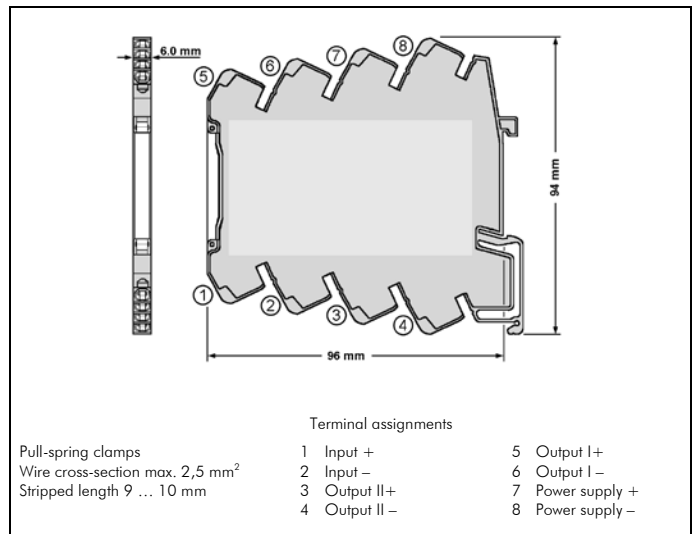
Bold: Factory settings for D6N 21000

Product line

Device	Order No.		
Isolation Signal Splitter, calibrated range selection	D6N 21000		
Isolation Signal Splitter, customer specific preselection	D6N 21005 –	X	X
		↓	
Input	0 ... 20 mA	0	
	4 ... 20 mA	1	
	0 ... 5 V	2	
	0 ... 10 V	3	
	1 ... 5 V	4	
	2 ... 10 V	5	↓
Output I	0 ... 20 mA		0
	4 ... 20 mA		1
Output II	0 ... 20 mA		0
	4 ... 20 mA		1

Example: Input: 0 ... 10 V, Output I and II: 4 ... 20 mA
Order No.: D6N 21005 – 311

Dimensions



Subject to change !