

Repeater Power Supply HART D6C 52500

Powering and Isolation of 2-wire Transmitters with HART Communication

With the Repeater Power Supply HART D6C 52500 DRAGO is extending its offer on high-accuracy and high-reliable components of the interface technique.

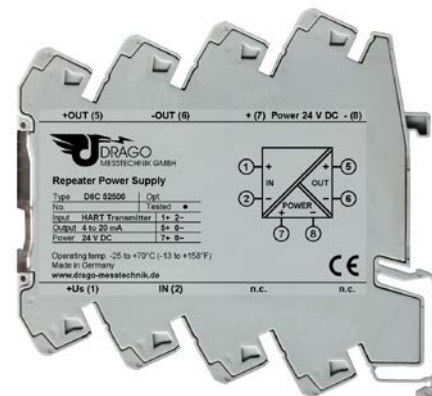
The D6C 52500 repeater power supply is used to supply and separate 2-wire transmitters. It supplies the transmitter with power and transmits the measurement signal to the output galvanically isolated and with high accuracy. In addition to the analog signal, the D6C 52500 also transmits data protocols for HART transmitters. It allows bidirectional communication with the field device from every point of the cabling.

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.

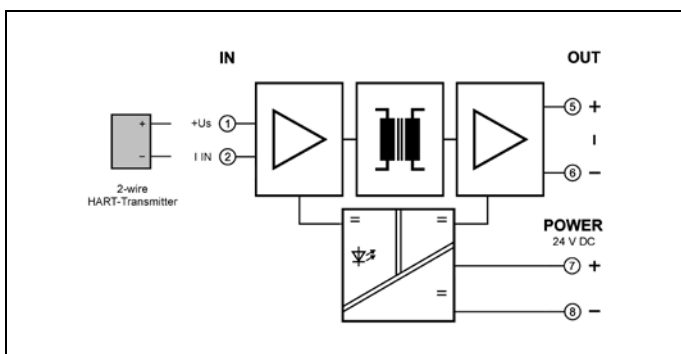
The optimized efficiency of the D6C 52500 power pack contributes significantly to reducing the units own heat generation. This is reflected in extremely high MTBF, it means highest reliability and long-term stability. A green LED on the front of the unit has been provided to monitor the power supply.

- **Energization of 2-wire transmitters**
Provides the transmitter with energy
- **Undisturbed HART transmission**
Bidirectional HART data transfer across the separation
- **3-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 EN61140**
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

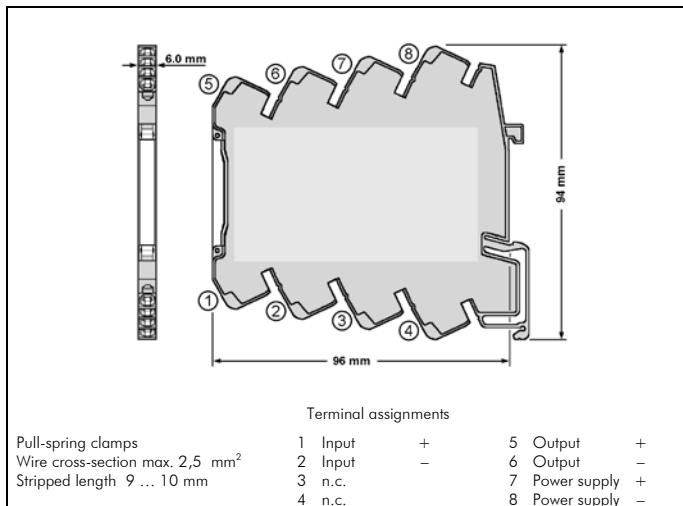


Technical Data

Input		
Input signal	4 ... 20 mA	modulated with HART signal
Input resistance	≤ 50 Ω	
Transmitter supply voltage	Approx. 18 V	
Max. supply current	30 mA	
Output		
Output signal	4 ... 20 mA	modulated with HART signal
Load	230 Ω ... 600 Ω	
Offset	< 20 μA	
Linear transmission range	-1 ... +110 %	
Ripple	< 10 mV _{rms}	
General Data		
Transmission error	< 0.1 % of final value	
Temperature coefficient ¹⁾	< 100 ppm/K	
Cut-off frequency (-3 dB)	≥ 2.5 kHz HART signal	
Response time (T _{10,90})	< 0.2 ms	
Test voltage	2.5 kV, 50 Hz	Input against output 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.	
Protection against electrical shock ²⁾	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.	
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 V ... 31.2 V DC, approx. 1.2 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

Dimensions



Product line

Device	Order No.
Repeater Power Supply, HART Communication	D6C 52500

Subject to change !