# Dupline® Field- and Installationbus Accessories Type GTU8, Test Unit





- Portable test unit
- Monitoring of Dupline channel status
- LCD-display
- 12-key tactile keyboard
- Supplied by Dupline
- Transmission latch
- Dual-group reading
- Analog BCD reading

### **Product Desciption**

Test unit for Dupline modules and networks. Monitoring/control unit with LCD-display.

Highly recommended for Dupline system start-up, trouble-shooting and maintenance.

## Ordering Key GTU

Type: Dupline	
Type no. ——	

## **Type Selection**

Supply	Ordering no. Test unit
Supplied by Dupline	GTU8

## **Supply Specifications**

Power supply	Supplied by Dupline
Reverse-polarity protection	Yes
Rated operational current	< 4.0 mA

### **Product Specifications**

Output Connection	Dupline 3 mm Jack socket
<b>Display</b> Type	2 x 16 characters LCD
Height of dots	5 mm
Keyboard No. of keys Channel keys Command keys	Tactile keys 12 1-8 «↑»«↓» (scroll up/down) « MODE », « ENTER »
Cable 1 GTU8 connector Dupline connector Signal Common	GTU8 to Dupline 3 mm Jack plug 2 mini grips Red Black
Cable 2 GTU8 connector Dupline connector	GTU8 to ASIC module 3 mm Jack plug 1 6/6 modular plug

### **General Specifications**

Environment	
Degree of protection	IP 40
Pollution degree	3 (IEC 664)
Operating temperature	0 to +50°C (32 to 122°F)
Storage temperature	-20 to +60°C (-4 to -140°F)
Humidity non-condensing	20 to 80%
Mechanical resistance	
Shock	15 G (11 ms)
Vibration	2 G (6 to 55 Hz)
Dimensions (I x w x d)	145 x 90 x 28 mm
Material	ABS, grey
Weight	250 g

### CARLO GAVAZZI

### **Mode of Operation**

128-channel portable transmitter/receiver unit supplied by Dupline. The GTU8 can be used anywhere along the two wires to monitor and control the status of Dupline channels. This unit is highly recommended for start-up and maintenance work on Dupline systems.

The GTU8 can operate in 4 different modes:

> Digital 1 group Digital 2 groups Edit Tx-latch Analog BCD

The start-up mode is "Digital 1 group".

To change mode:

- 1. Press « Mode »
- 2. Shift between mode options by pressing either  $\langle \uparrow \rangle$  or  $\langle \downarrow \rangle$ .
- 3. Select mode by pressing « Enter ».

#### Digital 1 group

Once connected to the Dupline, the display shows the status of channel group A. Active channels are indicated by their numbers. Pressing «1». «2» ... «8» will activate the corresponding Dupline channel in the selected channel group.

Pressing «↑» or «↓» changes the channel group shown in the display.

#### **Digital 2 groups**

When the mode "Digital 2 groups" is selected, the user may select an additional channel group for permanent monitoring on the bottom line of the display. The channel status of the two selected groups can now be monitored, but changing the channel status through the keys «1» ... «8» only affects the channels displayed in the upper row of the display. Even so, pressing the «  $\uparrow$  » or «  $\downarrow$  » key only changes the channel group in the upper row of the display.

#### **Edit Tx-latch**

In this mode it is possible to "latch" the activation of one or more channels. This means that the GTU8 will continue transmitting on the channel(s) even though the corresponding transmission button is released.

To cancel the transmission on a channel, press the corresponding transmission button again.

The latched transmission will continue even if the channel group or mode is changed. In order to change the status of a latched transmission, it is necessary to re-enter the "Edit Tx-latch" mode.

All the latched channels are reset to normal Dupline operation whenever the GTU8 becomes disconnected from the Dupline.

#### **Analog BCD**

In this mode it is possible to monitor values from analog transmitters that use the multiplexed 3 1/2-digit BCD format. The analog values are shown as BCD numbers within the range of -1999 to 1999.

By pressing «↑» or «↓» the group addresses can be changed. By keeping « Enter » pressed while activating « 1 » or «↓», the multiplex address will change instead.

The display will show "Wait" until the selected multiplex address has been present on channels A1-A4.

If no analog value is transmitted on the selected address, the display will show: "None".

If the analog value on the selected address is not valid, the display will show: "Error".

If the multiplex address "OFF" is selected, the display will show the analog value transmitted on the selected channel groups disregarding the multiplex address.

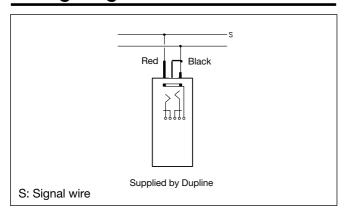
"OFF" should be selected when the analog transmitters are used in non-multiplexed mode.

If a specific analog transmitter is to be tested, it is possible to set up its multiplex address in "Tx-latch" mode and then go back to the "Analog BCD" mode to monitor the value.

Warning: Do not plug or unplug the Jack connector when the GTU8 is connected to Dupline. This will cause a short-circuit of the two wires.

Note: If the Dupline carrier is missing, the display will not turn on.

## Wiring Diagram



### Additional Information

#### Scope of supply

- 1 x Test unit
- 1 x Cable 1 (mini grips)
- 1 x Cable 2

GTU8 GTU8 - GRIP - CAB

GTU8 - ASIC - CAB