

## TELEM-DO8G digital output RTU module



The TELEM family RTU module TELEM-DO8 with latch outputs in conjunction with external relay block for control operation of 8 objects. Module bases on 16-bit DSP. Module can be used as an independent RTU or in connection with other devices. Interfaces to other equipment are RS-232, RS-422 or RS-485. Data exchange protocol IEC 60870-5-1-101.

### Features

- Leased line and dial up mode operation, data GSM communication request by RTS signal
- Configuration / parameterization with IEC 60870-5-101 protocol using Configuration Tool. Adjustable Control pulse length 20ms ...1min.
- Daisy-chain master-slave connection for up to 30 modules using RS-422 interface
- Self diagnostics and supervision simultaneously with data acquisition
- Operation execution control
- Relay coil impedance control before control operation
- Control operation execution signal

### Technical data

Number of controllable objects	8
Number of outputs for every objects	1 output for ON operation, 1 for OFF/TRIP operation
Relay block relay coil impedance	600 Ohm
Indication	2 for every output, 2 for power indication, 1 for operation indication, 1 for fuse failure indication, 1 for fail indication

### Power requirements

Supply voltage for main board	9-30 V DC, 4 VA
Supply voltage for external relay block	24 V DC, 3 W
Fuse protection	24 V 0,1A

### Installation, terminals and environment

Weight	0,4 kg
Mounting	DIN 35
Terminals for signal	MC1,5/8-ST-3,5
Terminal for power	MCVW1,5/8-ST-3,5
Terminal for communication	RJ45
Over voltage protection	IEC-60255-4, 5 kV pulse protecti IEC-60255-5, 2 kV DC on
Disturbance	IEC-61000-3-2, 61000-6-2, 6100-6-4
Ambient temperature in operation	-20...+50 °C

## Configuration

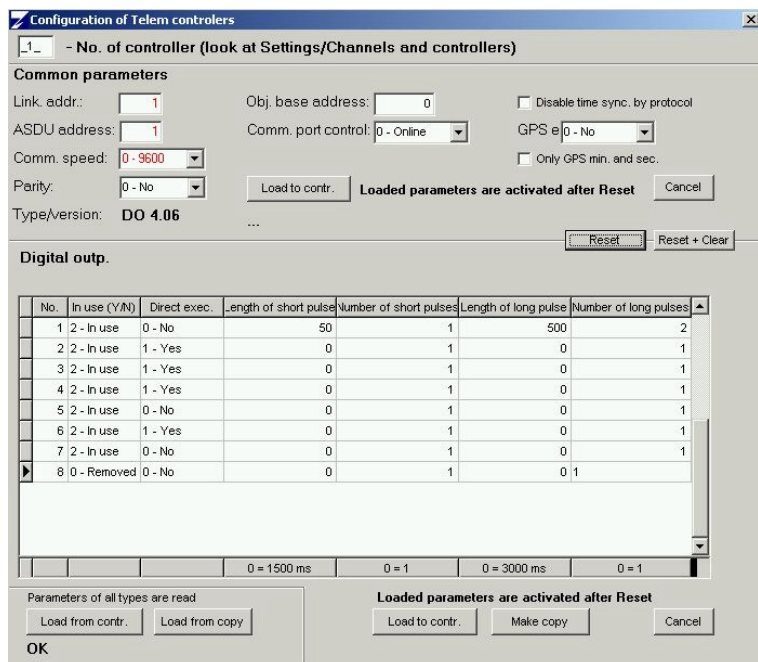
Configuration of TELEM-DO8 is configured using **TELEM 2000** software. All 8 digital outputs are configured independently.

### Communication ports configurable parameters and general settings

Communication speed	200 - 38400 bps
Link Address	1 - 255
ASDU address	1 - 255
Object's base address	0-65534
Communication mode	Online, Online with RTS/CTS, Offline with RTS
GPS enabled	Yes/No

### Configuration parameters for digital outputs

In use	Yes/No
Control mode	Select and execute / Execute
Short pulse duration	1 - 65535 ms
Number of short pulses	1-255
Dead Band 1 for events without time tag. Min. interval for events.	0,01 - 100 % 2 % 1 - 65535 ms
DeadBand2 for time tagged event. If this value change takes place within specified time period, then two events are created with min and max values of this time period	0,01 - 100 %
Time interval for Dead band 2 .	1 - 65535 ms
Time interval for periodical time tagged values	1 - 65535 sec



**Configuration of Telem controllers**

\_1\_ - No. of controller (look at Settings/Channels and controllers)

**Common parameters**

Link addr:  Obj. base address:   Disable time sync. by protocol

ASDU address:  Comm. port control:   GPS enabled:

Comm. speed:   Only GPS min. and sec.

Parity:   **Loaded parameters are activated after Reset**

Type/version: **DO 4.06**

**Digital outp.**

No.	In use (Y/N)	Direct exec.	Length of short pulse	Number of short pulses	Length of long pulse	Number of long pulses
1	2 - In use	0 - No	50	1	500	2
2	2 - In use	1 - Yes	0	1	0	1
3	2 - In use	1 - Yes	0	1	0	1
4	2 - In use	1 - Yes	0	1	0	1
5	2 - In use	0 - No	0	1	0	1
6	2 - In use	1 - Yes	0	1	0	1
7	2 - In use	0 - No	0	1	0	1
8	0 - Removed	0 - No	0	1	0	1

Parameters of all types are read

**Loaded parameters are activated after Reset**

OK