





**10 ms Real-Time Data Monitoring** 



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### Introduction

DE DLG 8CH is an 8-channels, current/voltage DC data logger. Input current/voltage signals can be from sensors, transducers, transmitters or any other common current/voltage sources.

12-bit ADC makes it well suited for industry and laboratory applications where precise and accurate measurements are critical. Processor is STM 32-bit.

Simply plug the logger to computer's USB port or use WiFi connection feature, and the software automatically recognizes it and handles the configuration, downloading, graph viewing and more...

### Features

- Extremely easy to use data logger with SCADA software
- Software is free to download for all data logger models
- Data sampling from 10 ms for all 8 channels connected
- Real time data monitoring feature on connected PC
- External START and STOP inputs for logging data process
- 12-bit analog-to-digital converter
- Both USB and WiFi interfaces with auto baud rate of 115200 bps
- Input ranges (4-20mA, 0-10VDC)
- 32-bit MCU

# **DE DLG 8CH Product range**

Model	Connection	Input data	Input data
V	USB	8 inputs 0 10 VDC	
1	USB	8 inputs 4 20 mA	
4V4I	USB	4 inputs 0 10 VDC	4 inputs 4 20 mA
WV	WiFi connection	8 inputs 0 10 VDC	
WI	WiFi connection	8 inputs 4 20 mA	
W4V4I	WiFi connection	4 inputs 0 10 VDC	4 inputs 4 20 mA

## **Downloads**

Web page for DE DLG 8CH Data Loggers	Visit page
DE DLG 8CH models Data Sheet	Download
DE DLG 8CH models User Manual	Download
SCADA Software for WiFi DE DLG 8CH models	Download
SCADA Software for USB DE DLG 8CH models	Download
STM Driver - VCP_V1.5.0_Setup_W7_x86_32bits	Download
STM Driver - VCP V1.5.0 Setup W7 x64 64bits	Download
STM Driver - VCP V1.5.0 Setup W8 x86 32bits	Download
STM Driver - VCP V1.5.0 Setup W8 x64 64bits	<u>Download</u>



### **Electrical connections**

On image below is described data logger electrical connection. You can connect up to 8 X voltage 0 ... 10 VDC or 8 X current 4 ... 20 mA or combined 4 X voltage + 4 X current inputs according to model. There are also optionally external inputs for starting and stopping data logging. It is optionally to use. You can always control data logging from SCADA software interface.

# USB MODEL CONNECTION





## **Step By Step Guide**

After ordering Data Logger first step is to download necessary files, install all and prepare your PC for connecting to the data logger and start measure and logging activities.

- 1. Download and install free Java software to your PC.
- 2. Download and install STM driver to your PC (32 bit, 64 bit, W7, W8...) Only for USB models.
- 3. Download FREE SCADA software for data logger <u>USB or WiFi SCADA version from website.</u>

After downloading and installing all software your data logger is ready for connection and action. If you ordered data logger without WiFi connection you need to connect data logger with USB cable to your PC USB port.

## **Using SCADA** software

Click (or double click) to SCADA software file that you placed on your PC folder. You can also create icon on desktop for easier SCADA software starting.

After Delta Electronics welcome screen appears SCADA window for adjusting measuring parameters and monitoring, logging and reporting features (FIG 1). There are basically 4 sections to describe:



FIG 1

# LECTRONICS

#### FROM SECTION 1 DROP DOWN MENU YOU CAN CHOOSE COMMANDS FOR DATA LOGGING.

Setup - > ON (see FIG 2) to turn on window for setting parameters (see FIG 6).

**Setup - > OFF** (see FIG 2) to close setting window.

**Setup - > Save** (see FIG 2) to save adjusted parameters.

**Report - > Open** (see FIG 3) to choose saved report for displaying.

**Report - > Save Report** (see FIG 3) to save current measurement to report.

**Report - > Exit** (see FIG 3) to exit report mode.

Setup	Reports	Connection	Help	EXIT
ON	ISAVE ACC			
OFF	10.0	10.0		10.0
Save	[A1]	[A2]		[A3]
		FIG 2		



**Connection - > Connect** (see FIG 4) to establish connection with data logger. **Connection - > Disconect** (see FIG 4) to disconnect connection with data logger.

**Help - > ON** (see FIG 5) Open help for data logger.

**HELP - > OFF** (see FIG 5) Close help for data logger.

Setup Reports	Connection	Help	EXIT
	Connect	10 s	
• 10.0	Disconnect		10.0
[A1]	[A2]		[A3]
	FIG 4		++++++

Setup	Reports	Connection	Help	EXIT
	SAVEL ACC	quisition perio	On	
•	10.0	10.0	Off	10.0
	[A1]	[A2]		[A3]
		FIG 5		

**EXIT** to exit SCADA software.

FROM SECTION 2 YOU CAN CONTROL START / STOP OF DATA LOGGING (SEE FIG 6).

With button **PLAY** start data logging. With button **STOP** halt data logging. With button **SAVE** record logged data to report.







#### Acquisition tab (see FIG 7):

Here you can to set basic data about measurement: Report Mark, Operator name. You can also choose Acquisition period in seconds, sampling data time. All you have to do is to choose options, click Save and switch to next tab: Analog Inputs.



#### Analog Inputs tab (see FIG 8):

On this tab you can choose number of channels, colors for displaying channels, units for channels, ranges for channels and type of inputs (current or voltage). For example you can choose **bar** units with range **from 0 to 350** and with **Output 0 ... 10 VDC**. That means you have connected on that channel pressure transducer with analog output signal 0 ... 10 VDC and pressure range 0 ... 350 bar. Click Save and X to close setting window.

Num	ber of An	alog Inputs	s (max 8)	: 8			
(max 8 Chars) : Format: ####.#			C	utput			
	Name	Unit	Range:	from	to	010V	420mA
<b>A0</b>		bar		0.0	350.0	۲	$\circ$
A1				0.0	10.0	۲	0
A2				0.0	10.0	۲	0
<b>A</b> 3				0.0	10.0	۲	0
A4				0.0	10.0	۲	0
A5				0.0	10.0	۲	0
<b>A6</b>				0.0	10.0	۲	0
A7				0.0	10.0	۲	0
Save							







## **Reporting logged data**

Manipulation with data from reports is very easy. Just open saved report (see FIG 9) and you will see all data in multiple variations (graphically or tables).



From up dropdown menu is very easy to turn ON and OFF table, adjust viewing with multiple zoom commands, prearranged views, print all data ...

Choose your data logger

