QUICK GUIDE

FOR CONNECTING CONTROLLERS D -100,200,300,500

RAINBOW internet monitoring service SCADA

Datakom cloud service RAINBOW SCADA provides connection of an unlimited number of equipment with compatible Datakom controllers. It enables remote management, parameter control, viewing statistics and logs via the Internet using a web browser or a free mobile phone application.

Connecting controllers to this cloud service is possible using the following modules installed on the back of the controller in the appropriate slots:

- DATAKOM 2G modem module for line controllers D-XXX MK2,3
- DATAKOM Ethernet module for line controllers D-100,200,300 MK2,3
- DATAKOM WIFI-Module for line controllers D-XXX MK2,3
- DATAKOM COMM module with Ethernet, RS-485 and USB Host interfaces for controllers D-500,700MK2,3

The required parameters can be configured both from the front panel of the controller and through the special free Datakom software. Rainbow Plus, which can be downloaded and installed from this link:

https://datacom.com.tr/rainbow-plus/497/ProductList?lang=5

With this software you can:

1. Set up event notifications by email :

Scada Configuration	Basic IP Settings Email GSM RS232 Wifi Ethemet
Module Generator Mains Figure Analog Inputs	Smtp Port 587 Mail Server Name mail
Digital Inputs Digital Outputs Communication Basic	Mail Account Name D500
IP Settings Email GSM RS485/RS232 Wrfi	Email
Ethemet	Address 1 @
	Address 3 @

Note: it is not recommended to change the above settings of the mail account and the server for sending messages. If you want to change these settings, then your mail server must support operation without encryption.

2. SMS notifications and Internet connection settings via 2 G modem:

Scada Configuration	Basic IP Settings Email DNS GSM Ethernet RS485/RS232 Wifi
 Module Generator Mains Engine Analog Inputs Analog Outputs Digital Inputs Digital Outputs Communication Basic IP Settings Email DNS GSM Ethemet RS485/RS232 Wifi Synchronization DC Generator 	Enable Image: SMS Connection Enable Image: SMS conmands Enable Image: SMS on Mains Change Image: GPRS to RS485 Gateway Enable Image: SMS on Engine Run/Stop Image: SMS on IP Change Image: SMS on Engine Run/Stop Image: SMS on Engine Run/Stop Image: SMS on Active Miscellaneous Image: Service Center No Image: Service Center No APN Image: Service Center No Image: Service Center No User Name Image: Service Center No Image: Service Center No User Password Image: Service Center No Image: Service Center No
	SMS Phone Number No #1 No #2 No #3 No #4 Image: No #4

Notes: APN parameters and service center number are usually registered automatically. Numbers for SMS alerts must be specified in the international format. Your SIM card must have a paid SMS message package and an Internet connection.

3. Configure Ethernet interface parameters:

File loois Language Hei	p	
Scada Configuration	Basic IP Settings Email GSM RS232 Wifi Ethemet	
 Module Generator Mains Engine Analog Inputs Digital Inputs Digital Outputs Communication Basic IP Settings Email GSM RS485/RS232 Wifi Ethemet 	Ethemet Ethemet to RS485 Gateway Enable IP Address Network IP 0 ÷ 0 ÷ 0 ÷ 0 ÷ 0 ÷ Gateway IP 0 ÷ 0 ÷ 0 ÷ 0 ÷ Subnet Mask 255 ÷ 255 ÷ 0 ÷	

Notes: If the address and Gateway are zero, then the address is assigned from the local DHCP server.

Attention: In order to avoid problems with the "hanging" of the controller or problems with communication reliability, the Ethernet connection must be allocated to a separate virtual network (VLAN) or to a separate physical subnet on the router.

4. Configure WIFI module parameters:

The loois canguage theip									
Scada Configuration	Basic	IP Settings	Email	DNS	GSM	Ethernet	RS485/RS232	Wifi	
		CI							
Generator									
🗄 Mains				Γ					
Engine		SSID		L					
		ALC D		Γ					
🗄 - Analog Outputs		Wifi Passwor	a	L					
Communication									
Basic									
IP Settings									
Email									
···· DNS									
GSM									
Ethernet									
RS485/RS232									
Wifi									
· Synchronization									

5. Configure the Rainbow Scada server address (wss1.datakom.com.tr):

ile Tools	Language	Help									
Scada	Configuration		Basic	IP Settings	Email	DNS	GSM	Ethemet	RS485		
Module Generator Mains Guine Analog Inputs Digital Inputs Digital Outpu Communicati GSM Ethemet RS485 Synchronizat	s ts on gs		Use	b Control Program Program P # IP # IP #	Enable nming Er #1 255 #2 0 #3 0	5 🔹 -		Server TCP.	/IP Port		×
				Address #	1	wss1.dat	akom.co	m.tr	Port	90	*
				Address #	2				Port	90	*

After the necessary above settings are made and the connection of the controller to the Internet is established, you can make sure that the controller has an active connection to the server. To do this, on the controller screen, you need to find the section corresponding to the type of your connection and see if the number of exchange packets with the Scada server changes over time (the frequency of change depends on the preset settings for the data exchange frequency).

For modem:



For Ethernet interface:



After that, you need to find on one of the controller screens its unique number, which will be used to add the device to the Rainbow service Scad a:



Then, you need to go to your Rainbow through your computer's web browser . scada account (Section Manage). If there is no such account , then you must first register it:

https://rm.datacom.com.tr/

https://rm.datakom.com.tr						
	Rainbow Scada Login					
	Username	*				
	Password	*				
	Login					
	Manage					
	Register					
	Password Reset					
	This application requires one of these Firefox 52+, Chrome 49+, Safari 10.1+	browsers: or IE Edge+				

Then, add a device according to the previously found Device Unique - ID :

Tool Help							
			Below are the tasks	ou can acco	mplish with this a	ccount	
Welcome	Customers Users Nodes Devices Ownershi	p User Logs Device Log	gs Device Password Generator				
ID	Unique-ID	Site-ID	Engine-SN	Parent	Version	Customer(s)	
I	No filter applied	DUCTUR CTTP TO			DKODD5 00	Techpro	
3700	1500001420213BAFD94F3E5C	ENGINE SITE ID		1	DROBDSOO	DeptNede(c)	
						Our Root Node	
						Add Device(s)	
						Delete Device(s)	
		Add Device by Unique-ID		×		Add Device by Unique-ID	
		Info: Enter the	Unique-ID of the device	below		Device Search	
		Unique-ID:		Save		Device Next	

Notes:

At the time of adding, your device must have an active connection to the Internet and to the Rainbow server scada . Otherwise, the device will not be found and added.

If your device has already been added to any other account on this server, then it cannot be added to your account until it is removed from the previous account . The issue of deletion is resolved through the owner of such an account , who must send a request to delete the device to Datakom by email : <u>technical . support @ datacom . com . tr</u>.

Each of the devices must be located in the corresponding node (node). If there is no Node, then you need to create it and move the device to it. Otherwise the device will be in Scada not active.

After the controller has been successfully added to your account , you can go to the main RAINBOW section scada . This can be done either through a web browser :





Or through the mobile phone app:

http://www.datacom.com.tr/





Notes:

Devices that are currently inactive (which do not currently have a connection to the server) in the system are marked in gray.

Update of information about the activity of devices and their parameters is carried out with a certain frequency, provided by the current settings.

Complete information about connecting and using Rainbow scada can be obtained from these links:

http://www.datakom.com.tr/rainbow-scada/76/48/ProductDetails?lang=5

http://www.datakom.com.tr/upload/Files/REMOTE%20MONITORING.pdf

http://www.datakom.com.tr/upload/Files/RainbowScada_USER.pdf