# Dynamic Domain Name

# **Operation** Guide

How it works with 3GTrack Data Logger?



(i) This manual is not necessary when static (fixed) IP is used in Server.

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### 1. How to get data from GPRS Data Logger?

Data can be live and historical.

There are 4 different modes of getting data from GPRS Data Logger.

- "GS828\_Centre" is the Standard version of server software.
- "GS828\_Server" is the Premium version of server software.

This manual is mainly describing the use of "GS828\_Centre" software in getting live data via Internet.

By Internet:

- Both "GS828\_Centre" & "GS828\_Server" software support receiving the data from GPRS Data Loggers via Internet.
- "GS828\_Centre" software will save data in text file.
- "GS828\_Server" software will save data in XML and other Database files.

This method is the most common way of receiving and managing the data.

However, there are two data communication protocols:

- 1) UDP
- 2) TCP



# 2. How does the Data Logger find the location of server?

- Server is assigned with public fixed IP address [or static IP]
- Server points to the dynamic domain name

This manual describes the installation and operation of using dynamic domain name.

#### 3. Before Installation

Hardware Requirements:

Server PC:

- Intel Core2 Duo CPU E6550 or above
- 2GB RAM, 100GB hard disk
- Windows XP Professional/Vista Premium/7
- Min. 1024 x 768 display
- Internet connection ready

#### SIM card

- GPRS service is activated
- Call ID service is activated
- PIN code must be removed (disabled, but not 0000)

Start Up Steps

- (1) Register Dynamic Domain Name
- (2) Install IP Updating Software e.g. Dyndns Updater
- (3) Install server software e.g. Centre or Premium Server
- (4) Configure data logger

# 4. About using Dynamic Domain Name



Please check carefully your local network and router configuration:

In the example case of this manual:

A) GPRS Data Logger configuration should be setup as below.

Access Point:(please check with your local service provider)Server Port::7050Server IP:(leave blank)Domain Name:gs902.dyndns-ip.com

- B) Server Computer running the following software is assigned with local IP as below, but points to the dynamic domain name automatically.
  - 1. "GS828\_Centre" or "Premium Server"
  - 2. "Dyndns Updater"

Local IP: 192.168.0.12 Local Port: 7050

# 5. Dynamic Domain Name Registration

- There are a number of websites providing free or charged dynamic domain name.
- Here, we would quote an example using free service provided by <u>www.dyndns.com</u> for review.

	Network Services Inc.	DNS & Domains Email Services Performance & Secu What are you looking for? Sea	
Why DynDNS.com?	Services & Pricing	Support	Have an account?
	Get acc	ess to your host u	date logs with <u>Dynamic DNS Pro</u> .
My Account	Add New Hostnam	e	↑ Host Servic
Jynamic DNS Pro internet Guide 5LA Premier Support	You don't currently have a [ To get the full benefits of D your shopping cart 🚖 (or t	Dynamic DNS Pro ynamic DNS, inclu ry it with \$1.99 <u>m</u>	<u>ervice</u> in your account. Ing premium subscriber domains and other features, <u>add Dynamic DNS Pro to</u> <u>nthly subscription</u> ).
zone Level Services Jomain registration and cransfer, DNS hosting, Email services Host Services Dynamic DNS hosts, WebHop URL Forwarding	Hostna Wildc: only for DynDNS Pro	me: ard: crea users (for	dyndns-free.com     s
Dynect SMB SendLabs SMTP SSL Certificates	Service Ty	/pe: <ul> <li>Host</li> <li>Web</li> <li>Offling</li> </ul>	nuscuynuns-youruumain.com) with IP address Iop Redirect (URL forwarding service) e Hostname

Register a hostname and select the host, and in our case:

- Hostname: gs902
- Host: dyndns-ip.com

# 6. Updating IP in Server

• Download and run the software "Dyndns updater"



- Make sure that the server computer keeps running the "Dyndns Update".
- It allows the server computer keeping linking to the dynamic domain name.

O DynDNS Updater Configura	tion 4.1.6		
DynDNS Updater Home	<ul> <li>Settings</li> <li>Start Upda</li> <li>Display Upd</li> <li>Automatica</li> <li>Show a Sy</li> <li>Automatica</li> <li>Enable Dyr</li> </ul>	ter with Windows Jater Icon in Notification Area (S ally synchronize host list with Dyn stem Notification when updates o ally check for DynDNS software u IDNS.com Internet Guide on this l	ystem Tray) DNS.com occur ogrades PC
Advanced Logs Help	Version Inform	ation DynDNS Updater v4.1.6	You have the latest version.
Click for details)		ОК	Cancel Apply

() Make sure that the Status is "Good" after running the Dyndns Updater.

## 7. Updating IP in Router

- Some routers provide DDNS [dynamic domain name service]
- Configure the router with registered ddns account
- In this case, server computer does not need to run "Dyndns Updater"

TP-LIN	IK.	Cable/DSL Router
Cable/DSL Router Model No.:TL-R860	DDNS	
Status     Basic Settings     Quick Setup     Network     Advanced Settings     DHCP     Socializations	Service Provider: User Name: Password: Domain Name:	Dyndns (www.dyndns.org) 💌 Go to register
Security     Static Routing     Dynamic DNS     Maintenance     System Tools	Connection Status:	Enable DDNS     DDNS not launching !     Login Logout     Save

# 8. Port Setting in Router

- Service Ports must be enabled in Router
  - ✓ NET Server Port
  - ✓ Server Port
  - ✓ Client Port

TP-LIN	IK°			Ca	ble/DSL F	Router
Cable/DSL Router Model No.:TL-R860	Virtu	al Servers				
Status	ID	Service Port	IP Address	Protocol	Status	Modify
Basic Settings	1	5050	192.168.1.150	ALL	Enabled	Modify Delete
Quick Setup	2	6050	192.168.1.150	ALL	Enabled	Modify Delete
Advanced Settings	3	7050	192.168.1.150	ALL	Enabled	Modify Delete
+ DHCP	4	8050	192.168.1.150	ALL	Enabled	Modify Delete
<ul> <li>Forwarding</li> <li>Virtual Servers</li> </ul>	5	3306	192,168,1,150	ALL	Enabled	Modify Delete
Port Triggering     DMZ     UPnP     Security     Static Routing     Dynamic DNS     Maintenance     System Tools	Add Ne	ew) Enable All D	Previous	J		

### 9. Data Logger Setup

Following parameters should be configured in the data logger:

- Access Point: (please check with your local service provider)
- Server Port: 7050
- Server IP: (leave blank)
- Domain Name: gs902.dyndns-ip.com

🛟 GS828_Setup - G	S828 H/H2 (Version 6)			
Connection Setu © RS232 GSM Modem	up: vort: COM4 🔹 💓 Disco	nnect 🍯 Connection: 222111 🔻	Read Parameters	Command Success S Status Batch GS828_Setup Clear Init Version 3.1.9
💠 Phone Book	💠 GS828 H/H2 (Versio	n 6) 💠 Data Logs		
Device Setup	Analog Channel	Digital/Pulse Channel Relay Output	AD Alarm Message   IN Alarn	n Message   Data Record   Batch Setup
Device Proper	ties		GPRS Network	ule SIM Card GPRS Network
	Station ID	000000	Module Status:	• •
0	Enquiry Password	999999	Network Signal Strength:	
nwn	Setup Password	888888	Network Connection Type:	🌒 Fixed IP 🛛 🌖 Domain
	Date/Time	1101170414	Alarm Phone Number	2
	Data Logging Interval	05 Minute 🔹	🥥 🛛 Alarm Ph	one 1
GPRS Upload S	Setup		Alarm Ph	one 2
	GPRS Upload Interval	05 Minute 👻	ModBus Address Setup ModBus A	Address
	GPRS Data Format	Live Data 👻	GPRS Network Setup	
	Record Count	01 •	Access Po	Dint CMNET
SMS Upload S	etup		GPRS Ser	ver IP
	SMS Upload Interval	00 -	Server Po	ort 7050
	Control Centre Number		🥥 Domain N	lame gs902.dyndns-ip.com
Info			Protocol	UDP -
			Acknowle	dge Interval 0120
			🥥 Reconnec	t Interval 0888

Click #1 button

- Module Status 3 x LED: Green
- Domain LED: Green

### Set GPRS upload interval: 05 minutes, and format: Live Data

Data will be uploaded to the server.

#### **10. Receiving Data**

- Run the "Centre" or "Premium Server" software in server computer
- Make sure that the computer running "Centre" software also runs the "Dyndns Updater"
- When Router DNS service is used, "Dyndns Updater" is not necessary.
- Data will be saved in the "Data\_Logs.log" text file
- Only one day data will be saved, and overwritten on another day

Local IP: 192 . 168 .	. 12 Port: 9050 Close	GPRS Data Logger Data Receiving Centre V1.0.	
Live Data Display			
06/17/2010 12:50:36	Buffer Clear D:\GS828_Centre_0617\Data_logs.log	Save Path	
2010-06-17 12:48:11	117.136.12.196: #STA:123456;L:310;TM:100617124802;D:5;T:01;C:42;A00:0.041;A0	1:00000;A02:00000;A03:00000;A	
2010-06-17 12:47:53	117.136.12.196: @888123456		
2010-06-17 12:47:18	117.136.12.196: @888123456		
2010-06-17 12:46:44	117.136.12.196: @888123456		
2010-06-17 12:46:10	117.136.12.196: #STA:123456;L:310;TM:100617124600;D:5;T:01;C:41;A00:00000;A0	01:00000;A02:00000;A03:00000;/	
2010-06-17 12:45:53	117.136.12.196: @888123456		
2010-06-17 12:45:19	117.136.12.196: @888123456		
2010-06-17 12:44:45 117.136.12.196: @888123456			
2010-06-17 12:44:11 117.136.12.196: #STA:123456;L:310;TM:100617124402;D:5;T:01;C:40;A00:00000;A01:00000;A02:00000;A03:0			
2010-06-17 12:43:41	117.136.12.196: @888123456		
2010-06-17 12:41:17	117.136.12.196: @888123456		
2010-06-17 12:40:43	117.136.12.196: @888123456		
2010-06-17 12:40:09	117.136.12.196: #STA:123456;L:310;TM:100617124000;D:5;T:01;C:38;A00:00000;A0	01:00000;A02:00000;A03:00000;,	
2010-06-17 12:39:53	117.136.12.196: @888123456	la la la Ca	
2010-06-17 12:39:19	117.136.12.196: @888123456		
2010-06-17 12:38:44	117.136.12.196: @888123456		
2010-06-17 12:38:10 117.136.12.196: #STA:123456;L:310;TM:100617123801;D:5;T:01;C:37;A00:00000;A01:00000;A02:00000;A03:000			
2010-06-17 12:37:52	117.136.12.196: @888123456		
2010-06-17 12:37:18	117.136.12.196: @888123456		
2010-06-17 12:36:43	117.136.12.196: @888123456		
2010-06-17 12:36:09	117.136.12.196: #STA:123456;L:310;TM:100617123600;D:5;T:01;C:36;A00:00000;A0	01:00000;A02:00000;A03:00000;,	

(i) Don't forget to click [Close] before exiting the software. It will release the network port for other applications.

#### **11. Client Software**

- Select the domain name
- Enter the dynamic domain name registered above

Login	X
<b>GS828</b>	) Ilicali
Server Port: User:	<ul> <li>Server IP <a>Domain Name</a></li> <li>gs902.dyndns-ip.com</li> <li>7001 Listen Port: 7002</li> <li>admin</li> </ul>
Password:	••••
Details>>	ok
	Sign me in automatically

GS828 Client Software

	System Login
User ID:	admin
Password:	••••
•	) Server IP 💿 Domain Name
	gs902.dyndns-ip.com
Server Port:	7001 Client Port: 7002
• OK	Cannel

