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Emizon Site Diagnostics

ANDROID / IOS MOBILE APPLICATION USER GUIDE

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VERSION 1.0



Document History

Version	Date Released	Author	Comment
1.0	04-Feb-15	S Parsons	First Release

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1. Introduction

Emizon Site Diagnostics Mobile apps, are designed for Android and IOS devices. They allow authorised users from registered installation companies to access their TCD's connected to Emizon using an encrypted secure connection.

The apps are designed to help installers provide a more efficient customer service, whilst on the move, or simply to provide a method of putting the information needed at the tip of your fingers.

Key Features:

Add Installation - Device Overview - GPRS / IP / Extended Diagnostic - GPRS History - Firmware Update
- Send test alarm - View alarm logs - Control relays

Configure:

IP / Panel Type / Pin Setup / Relay Mode / Proxy Settings / PSTN Dial Prefix / Internal message alarm format / UDL Panel ID / UDL Message Enable / UDL IP Address / Ethernet Speed

2. Pre Requisites

2.1 - System Requirements

The Android app is designed to run on phones or tablets running **Android 3.0 Honeycomb** or higher.

The IOS app is designed to run on iPhones or iPads running **IOS 7.0** or higher

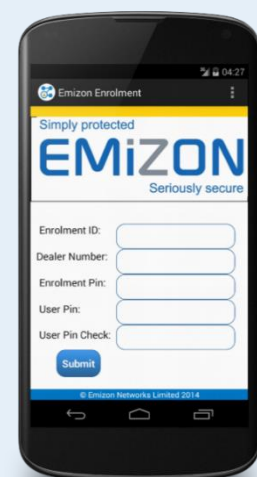
2.2 – Enrolment

Before using this application, you must first enrol your device. If you have already done this before using another Emizon application you will not have to repeat it.

To enrol your device, select the Action Button (IOS) or 3 dots options button (Android), both in the top right of your screen, then select Enrolment.

You will need to contact your installation manager for the details to put in here. “User Pin” is set by you, and is what you will use to login to the apps.

To remove enrolment from your device, go back to the enrolment page and select the “Remove Enrolment” button

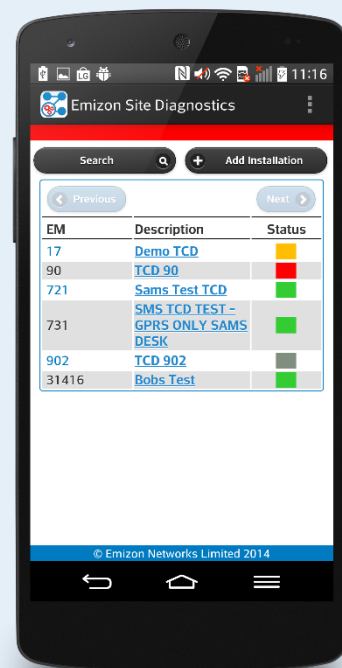


3. Pre Requisites

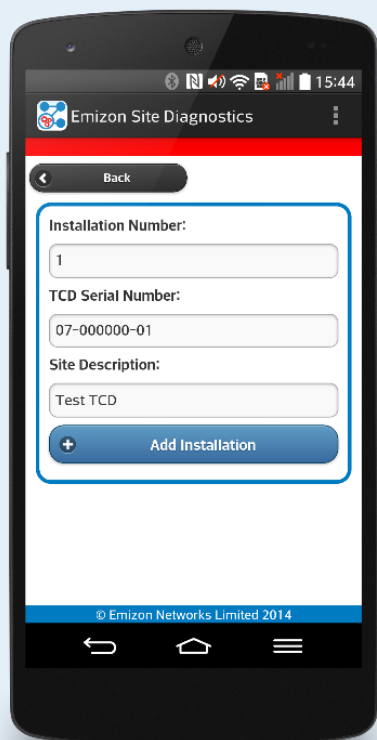
Site list is shown immediately after successfully logging in to the application. It lists up to 10 sites on phones and 20 on tablets along with the EM – installation number, and current status.

Installation lists can be navigated using the Previous and Next buttons, as well as using the search function, by Installation number, Serial Number, or Description

	All Clear
	Single Path Fault
	Duel Path Fault
	Not Activated



4. Add Installation



To add an installation, select “Add Installation” from the site list.

You will need to know the installation number and TCD Serial number before proceeding. Site Description is optional, if empty this will default to the installation number.

5. Overview

The overview function displays information such as TCD Serial number, description, grade, and the state of the two paths. “Description, Reference, and Location” can all be edited using the Emizon online maintenance windows software.

Poll Status:

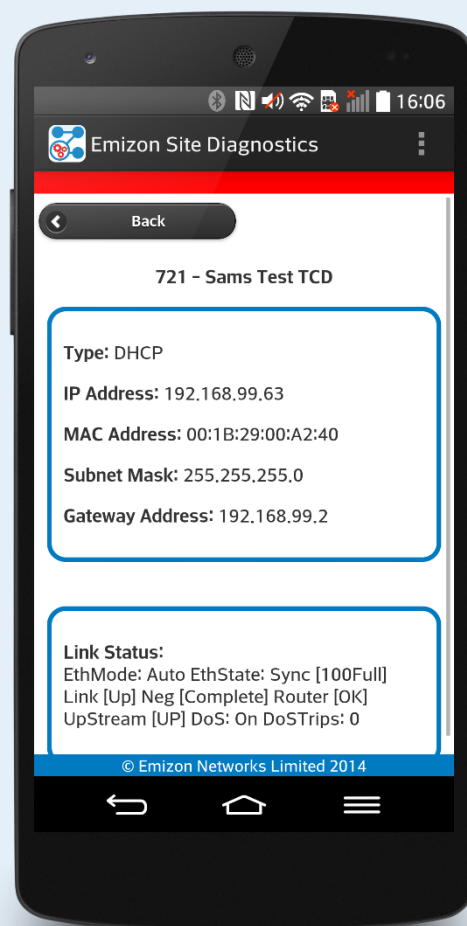
Each path of the TCD will be in one of the following states

Not Activated	Installation or path not activated
In Contact	Polling is OK
Out Of Contact	Polling has failed and path is in line fault

6. IP Diagnostic

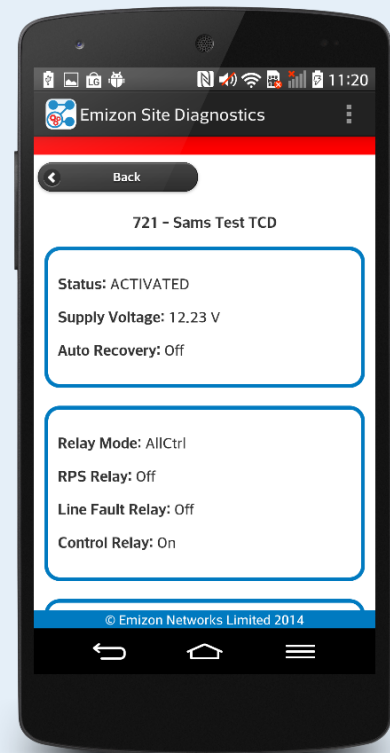
To view an IP diagnostic, select IP from the diagnostic panel.

Type	This can be DHCP or Static
IP Address	IP address assigned to TCD, either dynamically or statically
MAC Address	Hardware address of the TCD – also written on the TCD itself.
Subnet mask	The Subnet Mask
Gateway Address	Usually the internet router IP address
Link Status	Extra information about the connection, such as whether the TCD can see the router(Router[]) and whether the TCD can see the Emizon servers (Upstream[]) (If upstream is down, check TCP outbound ports 18000 – 18049 are open on the network)

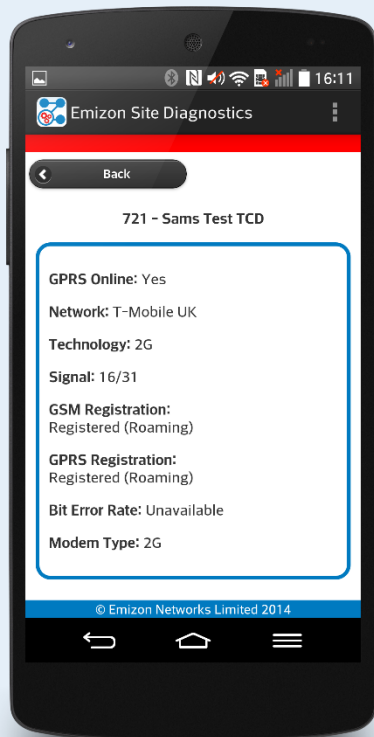


7. Extended Diagnostic

Status	TCD activation state
Supply Voltage	Voltage supplied to the TCD
Auto Recovery	Used on old TCDs without LPS to reactivated after power failure
Relay Mode	This can be changed in configuration
RPS Relay	Right Relay
Line Fault Relay	Middle Relay
Control Relay	Left Relay
PSTN Dial Prefix	Number required to access an outside line
PSTN Line Voltage	Voltage supplied across T1 and R1 terminals on the TCD



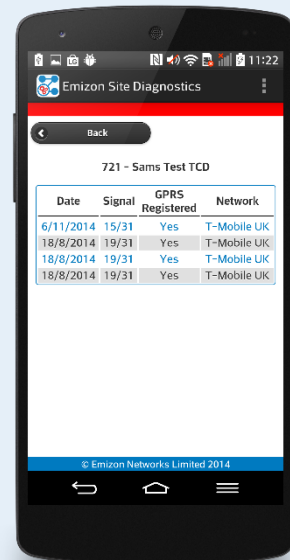
8. GPRS Diagnostic



GPRS Online	If the TCD is polling successfully
Network	Network provider TCD is connected to
Technology	2G or 3G network
Signal	This should be 12 or above
GSM Registration	Registration on GSM network (Roaming) indicates SIM can use multiple networks
GPRS Registration	Registration on GPRS network (Roaming) indicates SIM can use multiple networks
Bit Error Rate	Only older TCDs can report this
Modem Type	States weather it has a 2G or 3G modem

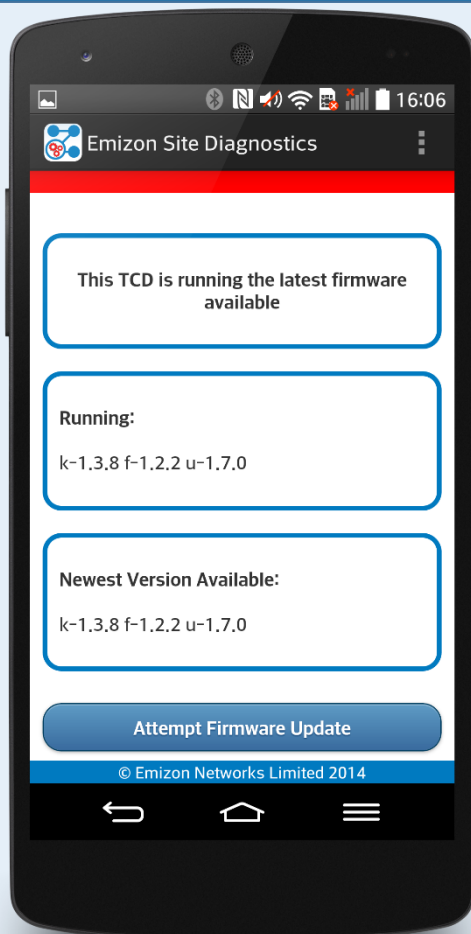
9. GPRS History

GPRS History shows the date, signal strength, registration state, and network provider for the last 50 GPRS diagnostics taken.

A smartphone screen showing the 'Emizon Site Diagnostics' app. The screen displays a table titled '721 - Sams Test TCD' with columns for Date, Signal, GPRS Registered, and Network. The table contains four rows of data, all showing 'Yes' for GPRS Registered and 'T-Mobile UK' for Network. The status bar at the top shows the time as 11:22 and various icons. The bottom of the screen shows the Android navigation bar with back, home, and menu buttons.

Date	Signal	GPRS Registered	Network
6/11/2014	15/31	Yes	T-Mobile UK
18/8/2014	19/31	Yes	T-Mobile UK
18/8/2014	19/31	Yes	T-Mobile UK
18/8/2014	19/31	Yes	T-Mobile UK

10. Firmware Update



To remotely firmware update a TCD, it must be on test, have LPS and be on “u – 1.5.4” or higher.

If this is not the case, the TCD must first be deactivated, this can be done through your ARC, calling the Emizon helpdesk, or by using Emizon Online maintenance.

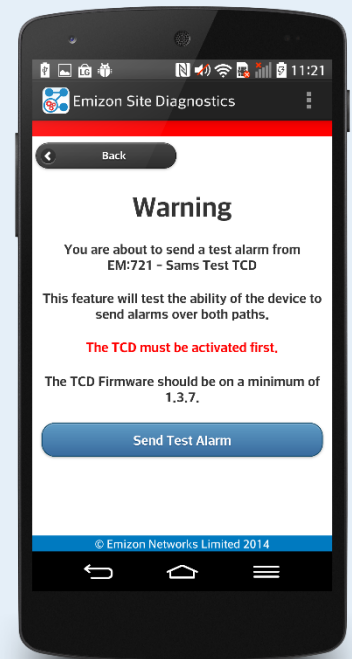
Once the request to update is sent, allow around 5 minutes, then revisit the firmware page to ensure it has been done successfully.

11. Test Alarm

This feature is useful to ensure both paths are signalling correctly.

Once the test alarm has been requested you will need to check in alarm logs to ensure it has been sent successfully. Depending on the setup of internal alarms, you will need to check for one of the following for both the primary and secondary panel.

Fast Format(Primary Path)	5555 5555 5555 5155 9
Fast Format(Secondary Path)	5555 5555 5555 5515 9
Contact ID(Primary Path)	E601 01 801
Contact ID (Secondary Path)	E601 02 802
SIA (Primary Path)	[#000000 Nti10:01:06/pi001/TX801 ATCD IP PRI TEST]
SIA (Secondary Path)	[#000000 Nti10:01:08/pi002/TX802 ATCD GPRS SEC TEST]



12. Alarm Logs

By default, alarm logs will show all alarms from the current day.

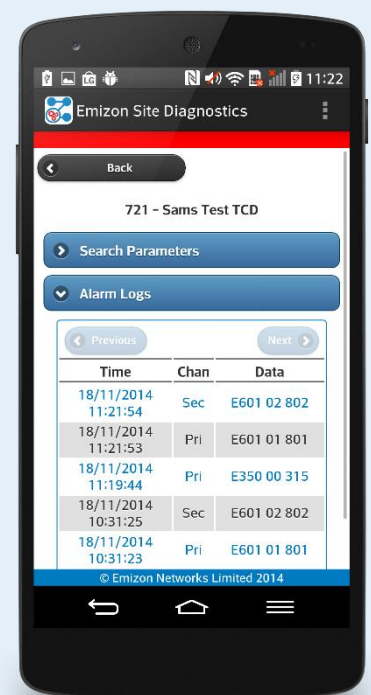
You can search by date, and optionally by a search term.

Alarms will be in Fast Format, Contact ID, or SIA depending on your setup.

12.1 - TCD Pin Alarms

Fast Format	<p>Each number represents a pin, in order, the final digit is the current status:</p> <p>5554 5555 5555 5555 7</p> <p>Pin 5 Status</p>
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Pin Values			Status Values	
1	New Alarm		7	Normal
2	Unset		8	Low Voltage
3	Restore		9	Test
4	Set			
5	Normal (No Change)			
6	Outstanding			



Contact ID	This format is split into 4 sections			
	Type	Code	Group	Area
	E	140	00	901
	Example pin 1 alarm. E140 00 901 Example pin 2 alarm below: E140 00 902			
SIA	A format that contains information such as time and date and a textual description of the alarm Pin 1 alarm example: [#000000 Nti14:36:39/UA901 ATCD INPUT 1 ALARM]			

12.2 - TCD Generated Alarms

<i>Ext. Panel Conn. Failure</i>	E350 00 315	
<i>Ext. Panel Conn. Restored</i>	R350 00 315	
<i>TCD Configuration Changed</i>	E306 00 830	Doesn't Reset
<i>TCD Restarted</i>	E305 00 831	Doesn't Reset
<i>Failure to Communicate</i>	E354 00 832	Doesn't Reset
<i>Supply Voltage Low</i>	E302 00 833	
<i>Supply Voltage Restored</i>	R302 00 833	
<i>Self-Test Failure</i>	E307 00 834	
<i>Self-Test Restored</i>	R307 00 834	

13. Relay Control

This function only gives access to the relays that are set as "control" This is can be set using the relay configuration function.

Labels for each relay, along with the buttons can be set using Emizon online maintenance windows software.



14. Configuration

14.1 – IP Config

<i>IP Setting</i>	If DHCP you do not need to enter any more IP settings
<i>IP Address</i>	IP address to be statically assigned to the TCD – Required for Static IP
<i>Subnet mask</i>	The Subnet Mask – Required for Static IP
<i>Gateway</i>	Usually Internet router IP address – Required for Static IP
<i>DNS1 & DNS2</i>	Optional settings

14.2 – Panel Type

If connecting your TCD using external interfaces set to the correct one for the panel you have connected the TCD to. We are constantly supporting new panels, contact Emizon for an up to date list of panel types.

14.3 – Pin Setup

Pos Applied	Voltage applied to pin will trigger new alarm
Pos Removed	Voltage removed from pin will trigger new alarm
Set/unset Pos Applied	Voltage applied to pin will toggle between set / unset
Set/Unset Pos Removed	Voltage removed from pin will toggle between set / unset
Disabled	Pin will never send any alarms
BSIA Form 175 Pos Applied	Pin 16 only, this disables pins 14 and 15. Triggered when voltage applied to pin
BSIA Form 175 Pos Removed	Pin 16 only, this disables pins 14 and 15. Triggered when voltage removed from pin

14.4 – Relay Mode

Setting	Left Relay	Middle Relay	Right Relay
<i>Normal / Default</i>	Control	Line Fail	Return Path Signalling
<i>Dual Line Fail</i>	Control	Duel Path Line Fail	Single Path Line Fail
<i>Split Line Fail</i>	Control	Primary Path Line Fail	Secondary Path Line Fail
<i>Duel Control</i>	Control	Line Fail	Control
<i>Triple Control</i>	Control	Control	Control
<i>RPS performance Fail</i>	Control	Line Fail	RPS Performance Fail

14.5 – Proxy Settings

By Default, the TCD requires a direct connection to the internet (or NAT'ed via a router). However it does support connection via a SOCKS proxy server. It will support SOCKS 4/5 with or without plain text authentication.

14.6 – PSTN Dial Prefix

Some phone lines require a number to be dialled before the phone number to access an “Outside Line”. The TCD accepts a maximum of 8 characters, including only digits, and commas to indicate a pause.

14.7 – Internal Message / Alarm Format

By Default the TCD sends input pin alarms in fast format, and internal alarm messages as contact ID, you can change this using this function

	Pin Alarms	Test Signal	Other internal alarms
<i>Original</i>	Fast Format	Fast Format	Contact ID
<i>Hybrid</i>	Fast Format	Contact ID	Contact ID
<i>Contact ID</i>	Contact ID	Contact ID	Contact ID
<i>SIA</i>	SIA	SIA	SIA

14.8 – UDL Panel ID

When connected to certain panels, the TCD is required to have an ID that identifies itself to the panel. The ID must be an unsigned number.

14.9 – UDL Message Enable

When a remote servicing request (UDL) is made, the TCD is able to generate an alarm to send to the alarm receiving centre to notify them of this event. This can be turned on or off. Default setting is off.

14.10 – UDL IP Address

When doing a call back UDL session to the installers PC, there are some panels that cannot indicate to the TCD what the IP address should be. This setting allows the TCD to use this IP address to connect back to the installers PC and start a UDL session.

14.11 – Ethernet Speed

The TCDs Ethernet interface can support speeds of up to 100MHz Full Duplex. Normally this setting is not needed as by default the interface is set to auto negotiate with the switch to determine its correct speed.

14.5 – Proxy Settings

By Default, the TCD requires a direct connection to the internet (or NAT'ed via a router). However it does support connection via a SOCKS proxy server. It will support SOCKS 4/5 with or without plain text authentication.

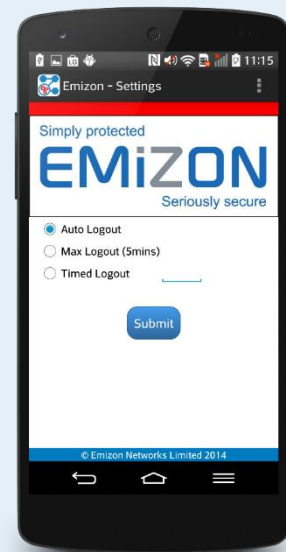
Please Note: if your TCD is on old firmware you may not be able to view or set some of these configurations, a warning message will notify you of this.

15. Settings

Settings menu can be accessed usually, from the top right corner of the app, (3 dots on Android – sometimes bottom right 3 lines) (Action icon on IOS)

From here you can set how often / quickly you want to be automatically logged out after closing the app.

<i>Auto Logout</i>	Will log you out every time the app is closed
<i>Max Logout</i>	Maximum allowed is 5 Minutes
<i>Timed Logout</i>	In Seconds from 0 - 300



16. Contact

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