

Pro-3200

Smart Portable Vibration

Diagnosis Instrument

Operation Manual

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Pro-3200 Installation and Measurement Quick Guide 1-2-3

APP download and installation

Search and download [Pro-3200] from Apple Store or Google Play to install it on your smartphone. Make sure the latter is connected to the Internet in advance.

2 Set up and connect your product in 5 steps

Open the instrument box, remove e-Gateway AG-300 Plus2, power bank, and vibration gauge, follow the following 1~5 steps to get your product installed.



- Connect output of power bank to DC input of e-Gateway AG-300 Plus2, switch on the power bank.
- 2. Wait until the green WLAN LED indicator lights up to proceed with WiFi connection setup for your smartphone.
- 3 In [Setup], [WiFi] menu of your smartphone, look for WiFi access point name →"TECOM_XXXXXX", the 6-digit number "XXXXXX" contained in the name should be the same of the last 6-digit of MAC address shown in SN label on the side of the e-Gateway AG-300 Plus2; if so, the WiFi network found by your smartphone is the same one of your different; press "TECOM_XXXXXX" to start connecting; the smartphone and your device connected successfully once the message "Connected" prompted.

S/N :	Connection between the two can be
261-450562R H5A00001	established only if this 6-digit number
001915XXXXXX	matches <mark>the one sh</mark> own in
Host ID : XXXX.XXXXXXXXXXXXXXXXXXXXXXXXXXX	"TECON XXXXXX" shown in your WiFi

4. Connect vibration gauge USB port to the 1st and 2nd RS485 port of e-Gateway AG-300 Plus2.

5. Mount magnetic vibration gauge to right position of equipment for measurement.

Once step 1~5 executed successfully the connection is set and the smartphone is ready for diagnosis operation.



Measurement and diagnosis

This device provides [Plug-and-play] fast connection diagnosis. Please power on the power bank and e-Gateway AG-300 Plus2 once step[2][Setup and connection] is done.

- 1. Enable the [Vibration diagnosis] APP on your smartphone
- 2. Auto log in the WiFi connected e-Gateway AG-300 Plus2 without any parameter setup as shown in figure below:



3. Execute vibration diagnosis operation with the help of APP wizard

Note: 1. Network security verification is required by remote login, which may include account setup and registration; please consult technical service experience and refer to advanced operation manual for this. 2. APP can choose 「MOTOR」, 「OTHERS」 two categories of equipment, [「]Motor」 equipment can provide Real-Time Measurement, Measurement Analysis Diagnosis and Report Management functions; ^r OTHERS _ provides functions such as Real-Time Measurement, Measurement and Measurement report management, but does not provide Analysis and Diagnosis functions.

Overview

Tecom smart portable vibration diagnosis instrument is one of the most innovative mobile maintenance products in the world. By making the most of IoT, sensor, and management software technology it is designed to measure vibration of running E&M equipment without extra power cord or network cable. With fully PnP based convenience, it is ideal for small and medium size manufacturers and enterprises in pursuing productivity 4.0.

Featuring IoT WiFi gateway (AG-300 Plus2), integrated vibration gauge VB-200STU, power bank, and iOS and Android platform available diversified smartphone APP (which can be downloaded, installed, and used immediately), Tecom smart portable vibration diagnosis instrument system is ideal for equipment installation or maintenance engineers for measuring temperature and vibration at equipment power contact, E&M, rotary machinery, and motor on the spot. In addition, it combines measurements made on site with interactive analysis and diagnosis of the system to provide instant, helpful, and effective target E&M equipment health analysis which, in turn, not only enable easy manufacturing E&M equipment management and upkeep in healthy status but also prevent hazardous system shutdown from happening.

Tecom smart portable vibration diagnosis instrument may connect up to 2 vibration gauges for multiple diagnosis at the same time. With a breakthrough in vibration measurement concept, it integrates vibration <u>measurement</u>, <u>analysis</u>, and <u>diagnosis</u> operation in one portable device to save working hours and reduce onsite maintenance and repair time significantly.

Tecom smart portable vibration diagnosis instrument system may help acquiring full first commissioning operation data that is critical for later maintenance and big data analysis for manufacturer in future product release.



Pro-3200 portable vibration diagnosis instrument

1. System structure



2. System composition

- (1) AG-300 Plus2: IoT Gateway x1
- (2) VB-200STU: magnetic external vibration sensor (with USB cable) x2
- (3) Power bank x1
- (4) Power supply x1
- (5) Smartphone APP (iOS, Android) (need to download and install on your own)
- (6) Quick installation guide (electronic file)
- (7) Portable vibration diagnostic carrying case and belt
- (8) Other connection related accessories



Vibration diagnostic equipment picture

3. System capacity

- 1. The e-Gateway AG-300 Plus2 of this portable vibration diagnosis instrument may connect and sync up to:
 - \rightarrow 2 vibration gauge (USB interfaced)
 - → sensor type: VB-200 STU
- 2. The smartphone may monitor up to 10 AG-300 Plus2 device at the same time
- 3. This portable vibration diagnosis instrument supports up to 20 users for concurrent diagnosis
- 4. Capacity of power bank: 10050mAh
- 5. Fully charged power bank may support portable vibration diagnosis instrument for 12 hours without stop

4. Equipment wiring

Open **portable vibration diagnosis instrument** carrying case and belt, and connect them according to wiring diagram shown below.

- A. Connect AG-300 Plus2 to VB-200STU with RS485(1/2)
- B. Connect AG-300 Plus2 DC Jack to power bank to the power cord
- C. WiFi connect smartphone to built-in WiFi router of AG-300 Plus2
- D. Mount (magnetic) vibration gauge to target equipment according to its installation guidelines



Once wired according to aforementioned diagram, your smartphone is now ready to execute test, analysis, and diagnosis over target equipment with the "vibration diagnosis" APP; follow the following diagram and steps E~F for computer and the Internet connection as required.

- E. Connect AG-300 Plus2 WAN port (blue) and LAN port of ADSL modem with network cable
- F. Connect AG-300 Plus2 LAN port (yellow) and PC with network cable (for system setup only)



5. RS485 wiring

(1) AG-300 Plus2

E-gateway AG-300 Plus2 supports up to 4 vibration gauge with RS485 (USB) connection as shown in figure below:



(2) VB-200STU

This portable vibration diagnosis instrument comes with 2 built-in vibration gauges VB-200STU; featuring integrated RS485 cable and USB connector the latter may direct connect to e-gateway AG-300 Plus2 as shown in the figure below:



6. Power bank wiring

This portable vibration diagnosis instrument comes with power bank power cord, please connect DC Plug to DC jack of AG-300 Plus2 and USB connector to USB port in power bank as shown in figure below:



7. Equipment dimension

- (1) AG-300 Plus2 dimension: 130mm (length) x 90mm (width) x 36 mm (height)
- (2) VB-200STU dimension: 30.5mm (length) x 30.5mm (width) x 11.5mm (height), 3M cable
- (3) Power bank dimension: 90.5mm (length) x 59mm (width) x 22mm (height)
- (4) Power supply dimension: 70mm (length) x 29mm (width) x 40mm (height)
- (5) Vibration diagnosis instrument dimension: 320mm (length) x 236mm (width) x 76mm (height)



8. Pro3200 portable vibration diagnosis instrument view





PRO-3200

9. AG-300 Plus2 view



10. Power supply and cord of power bank view



11. VB-200STU view

VB-200STU body with USB cable view:

12. Vibration gauge installation position (recommended)

Vibration measurement must observe the following rules according to ISO-10816 standard.

- 1. Close to the bearing
- 2. In direction either vertical or horizontal rather than 45-degrees or tilted direction

3. See diagram below for recommended installation position where the arrow symbol indicates direction and letter "x" the installation position.

Vibration gauge 3-axis direction

13. Installation Precautions

- (1) The vibration gauge wire must be loosened. The wire close to the vibration gauge body can not be tightened. Therefore, pay attention when handling the wire, and leave some flexibility to allow the wire to move freely without affecting the vibration.
- (2) After vibration gauge installation is completed, you can shake the vibration gauge by hand, the vibration gauge must be very solid, no shaking phenomenon, otherwise the vibration value will increase, but also increases the frequency of unpredictable. In practice, the vibrating gauge mounted with a magnet will be secured with quick-drying glue.
- (3) The point of installation must be thick steel, such as a motor body. Do not install on fan covers or heat sink fins or thin iron plates because they are too thin and easy to resonate, vibration values increase, and produce unexpected frequencies.
- (4) Generally, the vibration value will be less than 10 mm / s. If the vibration of the motor itself is not large and the vibration value is large, please re-check if the installation point and the vibration gauge are installed securely.
- (5) This vibration frequency response frequency range is 1-1130Hz.

14. Installation Reference

14-1 Vertical

When the vibration gauge is installed in the vertical direction, it should be placed just above the rotating shaft. At this time, the Z-axis of the vibration gauge is the vertical direction. Please note that the two legs of the magnet are parallel to the rotating shaft so that they can be fixed on the arc surface of the motor on.

14-2 Horizontal

When the vibration gauge is installed in the horizontal direction, it should be placed on the level of the rotation axis, does not put too high, so as not to increase the vibration value. Put the higher position, the greater the value of the horizontal vibration. At this time, the Z axis of the vibration gauge is the horizontal direction. If you measure only one point, it is recommended to use this point. Vibration measurement of the vertical direction, to be placed on top of the rotating shaft, then the vibration of the Z-axis is the vertical direction, please note that the two legs of the magnet parallel to the axis of rotation, it can be fixed in the motor arc on.

14-3 Axial

When the vibration gauge measurement value is the axial direction, it must be placed on the level of the rotation axis, do not put too high, so as not to increase the vibration value. Put the higher position, the greater the value of the horizontal vibration. At this time, the Z axis of the vibration gauge is the horizontal direction. If you measure only one point, it is recommended to use this point. Vibration measurement of the vertical direction, to be placed on top of the rotating shaft, then the vibration of the Z-axis is the vertical direction, please note that the two legs of the magnet parallel to the axis of rotation, it can be fixed in the motor arc on.

Equipment setup

1. Network setup

Step 1

- Keep your PC / NB and e-gateway AG-300 Plus2 in the same LAN segment (better have DHCP enabled on your PC / NB)
- Connect PC/NB and AG-300 Plus2 (LAN port) with Ethernet cable
- Connect power adaptor to AG-300 Plus2
- Open a browser on the connection, input AG-300 Plus2 setup page address http://192.168.168.10
- Input user name: admin
- Input password: IP585xAdmin
- Click **OK**

Step 2

(Skip this step for DHCP PnP network)

- In main menu on the left, click [Settings] \rightarrow [WAN].

- In WAN connection type dropdown menu, select [STATIC (Fixed IP)]

			Change Language En	glish
> Device Info	Wide Area Network (V	VAN) Settings	_	
Settings	You may choose different	connection type suitable for your e	nvironment. Besides, you ma	у
> LAN	also configure parameter:	s according to the selected connec	tion type.	
> WAN	Wide Area Network (W	IAN) Settings		
> Unit Pairing	WAN Connection Type:	STATIC (fixed IP) •		
* RS485	Static Mode			
Port Forwarding	IP Address	172.17.220.62		
Wireless	Subnet Mask	255.255.255.0		
VVII CICSS	Default Gateway	172.17.220.254		
System Management	Primary DNS Server	172.24.1.2		
	Secondary DNS Server	172.24.1.3		
	14 15			

- IP address: input IP data.
- Subnet mask: input subnet mask data.
- Default gateway: input default gateway data.
- Primary DNS server: input main DNS server data.
- Secondary DNS server input secondary DNS server.
- Click the [**Apply**] button at bottom of page once all settings were made successfully.

Try connecting to popular web sites (e.g., edition.cnn.com and <u>www.yahoo.com.tw</u> to validate external networking function

Set smartphone APP communication port to TCP 53100 ~53199 in case firewall management service is in existence.

2. Account setup

Step 1

In the Main Manu section on the left, click [Settings] \rightarrow [Unit pairing] then select the [Add] button.

> Device Info	Unit Pairing	Unit Pairing Information				
> Settings	Unit Pairing I	nformation				
> LAN	Name	Туре	IP Address	Lact Register Time	Status	Soloct
> WAN	Account	Subtype	MAC Address		Status	Jelect
> Unit Pairing		Refresh	Delete	Add	Edit	
> DI Settings						

Step 2

Check the [Select] column before selecting the [Edit] button

> Device Info	Unit Pairing	Information	_	_		
> Settings	Unit Pairing I	nformation				
> LAN	Name	Туре	IP Address	Last Register Time	Status	Select
> WAN	Account	Subtype	MAC Address	Last Negister Time	Status	Jelect
> Unit Pairing		Smart Phone			Initial	
> DI Settings	XXX	Smart Phone			in the set	
Device Settings	R	efresh	Delete	Add	Edit	

		Change Language English
> Device Info	Edit Unit	
Settings	Unit Information	
> LAN	Name	Richard
> WAN	Туре	Smart Phone •
Unit Pairing	Subtype	Smart Phone
• RS485	Account	103
Port Forwarding	Password	103
	MAC Address	ec:1f:72:6c:86:d8
• Wireless	IP Address	192.168.168.127
System Management	Status	Disconnected

- Name : input user name.
- Account : e.g. 103 (you can have 20 account with number in range of 100-119).
- **Password**: input password (better the same as account ID).
- Click [Save] button at bottom of page to keep settings you have made.
- Click [Start pairing] button.

				c	hange Language	Englis	h •
> Device Info	100	Smaπ Phone	a8:b8:6e:48:03:dc	00.04.03			•
> Settings	Jerry	Smart Phone	192.168.168.214	2016-01-01			
> LAN > WAN	101	Smart Phone	4c:66:41:0e:70:4f	00:31:41	Disconnected	٥	
 Unit Pairing RS485 	EE2	Smart Phone	192.168.168.72	2016-01-01	Disconnected		
• Port Forwarding	102	Smart Phone	40:4e:36:2e:43:e9	00:01:54	Disconnected		
> Wireless	Richard	Smart Phone	192.168.168.127	2017-10-19	Connected		
 System Management 	103	Smart Phone	ec:1f;72:6c:86:d8	16:03:11	Connected		
		Refresh	Delete	Add	Edit		*

- To edit user account: check the [Select] column; click the [Edit] button, and the existing settings of the account displays for you to change.
- To delete user account: when the user was disconnected check the [Select] column, click the [Delete] button to remove the account.

3. VB200 setup

This portable vibration diagnosis instrument supports up to 2 magnetic VB-200STU for concurrent measurement, analysis, and diagnosis; see section "RS485 wiring" for its installation.

The VB-200 series vibration gauge comes with default value of RS485 ID at 15; one RS485 cable may connect one VB-200 series vibration gauge only; factory default of this portable vibration diagnosis instrument may connect two VB-200 series vibration gauge; please connect the latter to the 1st and 2nd RS485 port of AG-300 Plus2; the 3rd and 4th RS485 ports are reserved for expansion in the future.

Connect only one VB-200 series vibration gauge in a RS485 port, otherwise the system may fail to identify individual gauge as each of them bears the same RS485 ID value of 15; please make sure only one VB-200 series vibration gauge is connected to one RS485 port to prevent setup confusion.

4. Wireless setup

Designed for e-gateway AG-300 Plus2 hardware, the "wireless setup" page contains options of WiFi mode, "Basic", "Advanced", "Security", and "Station list".

			Change Lar	nguage. English •
> Device Info	WiFi Mode Setting	_	_	
> Settings	WiFi Mode Setting			
> Wireless	Operation Mode	AP Mode •		
> WiFi Mode		Apply	Cancel	
* Basic				
Advanced				
Security				1
Station List	in the second se			
> System Management				

You may set WiFi mode into "Wireless AP mode" and "Wireless client mode".

The wireless AP mode is an AP with gateway serving as WiFi access point.

The wireless client mode set the gateway as a client to connect to other WiFi AP.

4.1 The wireless AP mode configuration (WiFi mode setup)

4.1.1 Basic wireless settings

This option enables user to set up basic wireless communication parameters including network name and mode with WiFi function default to Enable. WiFi [Enable] page: see figure below:

		Change Language Englis		
> Device Info	Basic Wireless Settings			
▶ Settings	You could configure the minimum nu	mber of Wireless settings for communication, such as		
> Wireless	Network Name (SSID) and Channel. The Access Point can be set simply with only the minimum setting items			
> WiFi Mode	Wireless Network			
Basic	MIEI	Enoble		
Advanced				
Security	Network Name(SSID)			
> Station List	Network Mode	11b/g/n mixed mode *		
- Station List	Frequency (Channel)	2412MHz (Channel 1) *		
System Management	Broadcast Network Name (SSID)	Enable *		
	AP Isolation	Disable •		
	BSSID	00:19:15:EA:4D:E4		

WiFi [Disable] page: see figure below:

> Device Info	Basic Wireless Settings
> Settings	You could configure the minimum number of Wireless settings for communication, such as
> Wireless	Network Name (SSID) and Channel. The Access Point can be set simply with only the minimu setting items.
> WiFi Mode	Wireless Network
Basic	
Advanced	
Security	Apply Cancel
Station List	

4.1.2 Advanced wireless settings

This option is aimed at setting up country/region and support channel with page as shown in figure below:

Device Info	Advanced Wireless 5	Settings
Settings	Use the Advanced Setup	page to make detailed settings for the Wireless. Advanced Setup
• Wireless	includes items that are n Control Tx Rates and Bas	ot available from the Basic Setup page, such as Beacon Interval, sic Data Rates.
> WiFi Mode	Advanced Wireless	
Basic	Country/Region	NONE
Advanced	Support Channel	Ch1~14 *
 Security Station List 		Apply Reset
Suctors Managemen		

4.1.3 Wireless security/encryption settings

This option is aimed at setting up wireless security and encryption to prevent equipment access and monitoring without certification; available security modes are WPASKWPA2PSK and Disable with factory default set to the latter. See figure below for page of this option:

		Change Language English 🔹
> Device Info	Wireless Security/Encryp	tion Settinas
> Settings	Saturi the wirelace security an	d encyntian to provent from unsutherized access and menitering
Wireless		
> WiEi Mode	Security Mode	Dicable
 Basic 	Decunty mode	Disable
Advanced		Apply Reset
Security	1100	
Station List		
System Management		
		Change Language English •
Device Info	Mirelass Security/Encor	tion Settings
> Device Inito	vvireless Security/Encryp	non Seungs
> Settings	Setup the wireless security an	d encryption to prevent from unauthorized access and monitoring.
> Wireless	Security Policy	
>WiFi Mode	Security Mode	WPAPSKWPA2PSK *
• Basic	WPA	
Advanced	WPA Algorithms	TKIPAES .
Security	Pass Phrase	12345678
Station List	Key Renewal Interval	3600 seconds (0 ~ 4194303)
> System Management		Apply Reset

Set up WPA algorithm, pass phrase, and key renewal interval; once set up and saved successfully users are required to input pass phrase set up here to connect to WiFi.

				Change Language English 🔹
> Device Info	Wireless Securi	ty/Encryption S	ettings	
Settings	Setup the wireless	security and encry	ption to prevent fro	om unauthorized access and monitoring.
> Wireless	Security Pol			
> WiFi Mode	Security Mod	Save Wireles	s Settings	PSK ·
Basic	WPA	Please be patie	ent and wait	
Advanced	WPA Algorithms	for a mon		
Security	Pass Phrase		12345678	
Station List	Key Renewal Inter	rval	3600 se	econds (0~4194303)
> System Management			spply F	Reset

The client end is required to log in WiFi router of e-gateway AG-300 Plus2 with his/her smartphone:

4.1.4 Station list

Users of this solution may monitor clients connected to AP.

						Change	Language	English
> Device Info	Station List	-	-	-	-	-	-	-
Settings	You could monitor stat	ions wh	ich assoc	iated to this A	P here.			
> Wireless	Wireless Network							
>WiFi Mode	MAC Address	Aid	PSM	MimoPS	MCS	BW	SGI	STBC
Basic	EC:1F:72:6C:86:D8	1	0	3	15	20M	0	0
Advanced						100	20	
Security								
Station List								
- Custom Management								
> System Management								

4.2 WiFi mode setting

Select STA mode and click [Apply] in the WiFi mode setting.

Device Info	VViFi Mode Setting		_	
> Settings	WiFi Mode Setting			
> Wireless	Operation Mode	STA Mode 🔹		
ViFi Mode		Apply	Cancel	
Station Profile				
Link Status				Ser Contraction
Scan Near AP				
> System Management				

4.2.1 Station profile

> Device Info	Stati	on Profile	2	-	_	_	_
> Settings	The S	Status pagi	e shows the settings	and current	operation status o	of the Station.	
> Wireless	Profi	ile List					
>WiFi Mode		Name	SSID	Channel	Authentication	Encryption	Network Typ
Station Profile	0	ABC	TECOM_D123456	Auto	OPEN	NONE	Infrastructure
Link Status							
Scan Near AP		P	lote: At present, S	TA only gu	arantees to sto	re 16 profile	s!
Ô		Add	Dele	ete	Edit		Active
System Management		11/1003020					

Having a gateway as an ordinary client, this page displays information of APs saved in the gateway; you may add, delete, and edit information of desired AP; select an AP and click "Open", the gateway will then auto connect to the AP; even after gateway restart connection to pre-set AP will be established automatically.

Click the "Add" or "Edit" button and the AP data edit page displays.

4.2.2 Edit station profile

Device Info	Edit Station Profile	
Settings	System Configuration	0
Wireless	Name	ABC
>WiFi Mode	SSID	TECOM D123456
Station Profile	BSSID	
Link Status	Network Type	Infrastructure •
Scan Near AP	Power Saving Mode	CAM (Constantly Awake Mode) *
	RTS Threshold	Used 2347 (range 1 - 2347, default 2347)
System Management	Fragment Threshold	Used 2346 (range 256 - 2346, default 2346)
	Security Policy	
	Security Mode	OPEN .

In most cases, users may change parameters of "Name", "SSID", "BSSID" and "Security policy" and leave default value of the others intact in the station profile edit page.

"Name": name of the profile

"SSID": name of AP

"BSSID": MAC address of AP

"Security policy": encryption mechanism of given AP

4.2.3 Station link status

			Change Language Eng	glish
> Device Info	Station Link Status	_		
 Settings 	The Status page shows	the settings and current op	eration status of the Station.	
> Wireless	Link Status			
VViFi Mode	Status	voip_mini (00-19-15-D	B-3E-96)	
Station Profile	Extra Info	Link is Up		
Link Status	Channel	6 (2437000 KHz) ; Cen	tral Channel: 6	
Scan Near AD	IP Address	192.168.168.203		
Scarricar Ar	Net Mask	255.255.255.0		
System Management	GateVVay Address			
	Link Speed	Tx(Mbps) 65.0	Rx(Mbps) 72.2	
	link throughput	Tx(Mbps) 0.0	Rx(Mbps) 0.0	
	Link Quality	Good 100%		
	Signal Strength1	Good 81%		

Link information after gateway connected to AP is shown here.

4.2.4 Scan near AP

			c	hange L	anguage English
	_				
Device Info	Sca	n Near AP	_	_	
Settings	This	page shows information of APs n	earby. You may choose one	e of the se	e APs connecting or
> Wireless	addi	ng it to profile.			
ViFi Mode	Nea	r AP List			
Station Profile		Connect	Rescan Add P	rofile	
Link Status		SSID	BSSID	RSSI	Authentication
Scan Near AP	0	BINGO	78:44:76:98:1a:10	100%	WPA2PSK
Countrie and the	0	Fusion-SOHO-Brian	00:a0:c6:00:d8:59	100%	WPA1PSKWPA2PSH
System Management	0	TECOM-WiFi-2.4G	60:45:cb:65:63:38	100%	WPA2PSK
	٠	voip_mini	00:19:15:db:3e:96	100%	WPA2PSK
	0	TECOM-WiFi-2.4G	60:45:cb:65:71:b0	100%	WPA2PSK
	0	TsoHome	48:ee:0c:ed:d6:31	91%	WPA1PSKWPA2PSk
	4		1		•

Scan gateway neighboring APs for information

Click "Connect" to connect the AP; data of the latter are not saved (data lost after gateway restarted).

Click "Rescan to scan" neighboring APs once again. Scanning may fail to identify all APs when there are many available nearby; rescan couple of times may be needed in case like this.

Click the "Add profile" button to save AP data in station profile file.

5. Hardware setup

AG-300 Plus2 pins definition diagram

APP software operation

By following steps set in homepage of [**Pro-3200 installation and measurement quick guide 1-2-3**] users of this vibration diagnosis instrument may auto connect to it for instant operation data query and vibration diagnosis analysis and report without account setup and login. Follow steps below to set up your vibration diagnosis instrument for user account and server IP address.

- 1. Open the [Vibration Diagnosis] APP on your smartphone
- 2. This vibration diagnosis instrument provides PnP quick online diagnosis; log in account 100~119 without other parameter settings as shown in figure below:

- 3. Input <u>Account: 100</u>, <u>Password: 100</u>, <u>Address: 192.168.168.10</u>, <u>Name: 100</u> or custom values defined earlier; initial values of account, password, and name are set to be the same; the system comes with 20 accounts (100~119) for equipment pairing use.
 - Account: 100 (there are 20 accounts available with ID in range of 100-119).
 - Password: your personal password (better the same as account ID).
 - Server IP: the IP address or server ID set by AG-300 Plus2.
 - Server name: name of AG-300 Plus2 server.

- 4. Check [**Remember account**], press [**Log in**], and the vibration diagnosis instrument page displays.
- 5. Depending on the type of equipment under test, select $\lceil MOTOR \rfloor$ or $\lceil OTHERS \rfloor$.
- 6. Please follow APP wizard to execute the following vibration diagnosis operation:
 - Vibration measures: select this option to monitor vibration readings of target E&M equipment; note that this is a pure monitoring function and without data saving.
 - (2) Diagnosis: Select this option for vibration measurement, analysis, and diagnosis with steps: [Input equipment data] →[Vibration measurement] →[Analysis diagnosis]; please follow APP wizard to get complete vibration analysis and diagnosis report.
 - (3) **Report management:** Access and manage reports provided by the system; distribute them to relevant personnel by email or communication software anywhere anytime.
- 7. If you have checked the [**Remember Account**] option, you may click the "**V**" icon on the right of account direct and fast login as shown in figure below:

- 8. Please check steps below if you failed to login:
 - (1) Is networking function of your smartphone enabled?
 - (2) Is network signal of smartphone in good conditions?
 - (3) Is AG-300 Plus2 powered on?
 - (4) AG-300 Plus2 equipment pairing set up?

- (5) Is AG-300 Plus2 networking function in normal conditions?
- (6) Is smartphone and AG-300 Plus2 WiFi [connected]?

Note: you may get Host ID on the AG-300 setup page once it is connected to external network.

In the main menu on the left, click [Device Info] \rightarrow [Status Overview] option, to get Host ID in the System Info window.

Device Info	Status Overview			
Status Overview	System Info			
DHCP Client List	Firmware Version	IOMv2_PR03200_v1.0.2SP0_r10153_2017-10-31		
System Log	System Up Time	0 day 1 hour 35 minutes		
	Host ID	1000.15.3745.379.333		

TECOM Corp., Ltd

No.23, R & D Rd. II, Hsinchu Science-based Industrial Park, Hsinchu, Taiwan, 300 TEL: +886-3-5775141 FAX: +886-3-5776855 http://www.tecom.com.tw

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This manual may be modified when necessary because of improvement of the product, modification, or change in specifications. This manual is subject to change without notice.