715-BP Reference Barometer
715 Precision Pressure Indicator

Additel 715-BP Reference Barometer
Additel 715 Precision Pressure Indicator

-------User Manual

[Version：260106V02]

Additel Corporation

STATEMENT

This user manual provides operating and safety instructions for the Additel 715-BP Reference Barometer and Additel 715 Precision Pressure Indicator. To ensure correct operation and safety, please follow the instructions in this manual. Additel Corporation reserves the right to change the contents and other information contained in this manual without notice.

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Safety Instructions

⚠ Indicates the user must refer to the user manual prior to using the instrument.

Warning:

◆Please read the user manual before using the product, especially the “Safety Instructions”;
◆The screen of the product can only be locked at a fixed angle, do not force the screen beyond the roughly 30 degrees of tilt;
◆If the product is damaged or malfunctions, please do not use it;
◆Use only approved accessories. If the accessories are discolored, cracked, or damaged, do not use them;
◆Before using the product, please make sure all the pressure connections are secure;
◆Do not disconnect or connect quick connectors under pressure.

Note:

◆Do not apply pressure beyond the range of the instrument, any damage caused by over pressure will not be covered by the warranty;
◆Do not use in or near explosive gases, vapors or dusty environments;
◆Avoid using the instrument in vibration, elevated temperature, high humidity or strong magnetic field environments;
◆In the case of exposure to condensation, the instrument must be dried out before switched on;
◆If the UUT utilizes liquid, the liquid must be compatible with SS, aluminum copper alloy, NBR and PU. Corrosive solvent can damage the system’s sealing and cause leakage;
◆Gas: we recommend nitrogen or dry air as a pressure media;
◆In case of serious abnormal, please switch it off and contact Additel.

* **Warning:** Conditions or operations which may cause injury to operator.
* **Note:** Conditions or operations which may cause damage to device or UUTs.

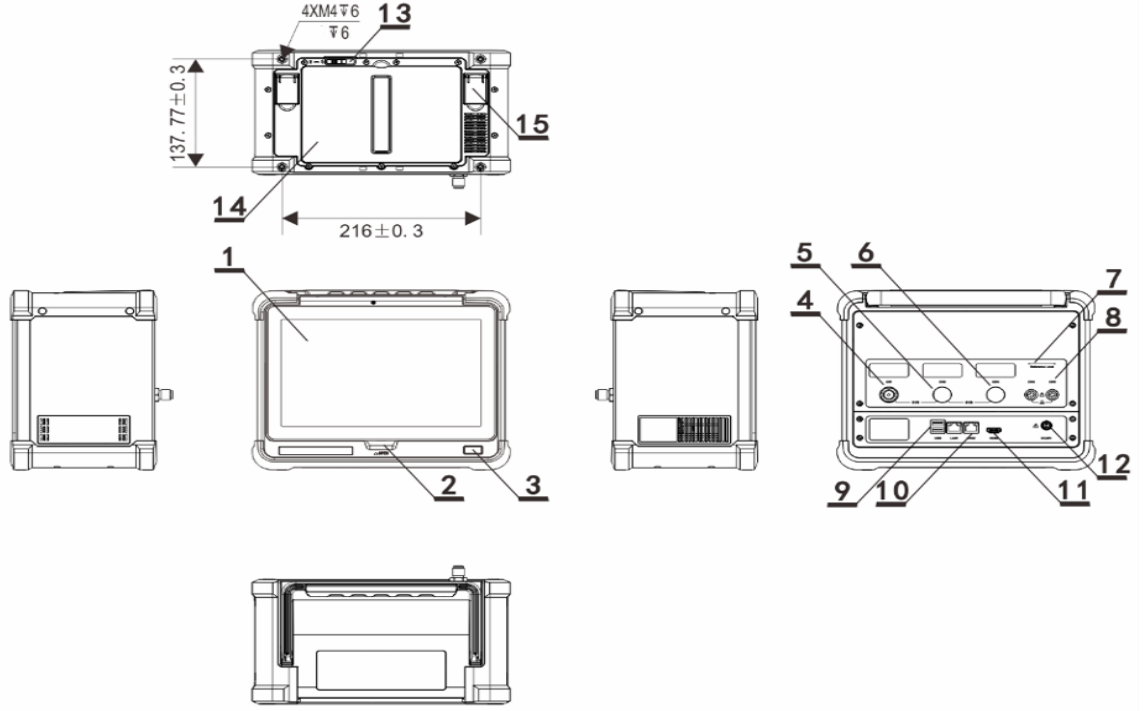
1. Model Configuration Table

Model	CH1 Internal Channel	CH2 Internal Channel	CH3 Internal Channel	CH4 External Channel	CH5 External Channel
Additel 715-BP 1 Internal Module 2 External Module Ports	● Barometric Module	-	-	○	○
Additel 715 2 Internal Module 2 External Module Ports	○ Barometric Module	● Gauge Pressure Module	-	○	○
Additel 715 3 Internal Module 2 External Module Ports	○ Barometric Module	● Low-range gauge pressure module	● High-range gauge pressure module	○	○

Note 1：● Required ○ Optional

Note 2：Choose the barometric module on CH1. Or choose 1 external barometric module connected on CH4 or CH5. By this, all channels support switch between gauge (GP) and absolute (AP) pressure

2. Basic Structure

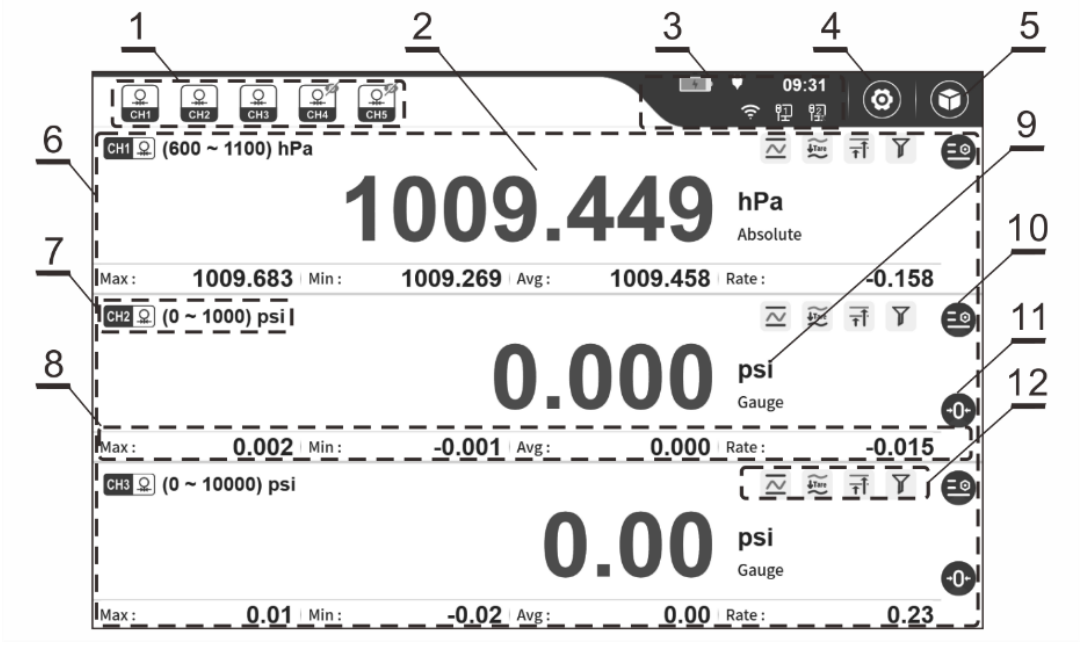


Basic structure diagram

Basic Structure List

No,	Name	Description
1	Display	10.1 inch touchscreen display
2	Screen lock	The screen is locked in the locked status, and the screen can be flipped by pressing upwards to unlock
3	Power button	Power on and off
4	CH1 port	Configurable baromatric module, 1/8 BSP F fitting with an 1/4 BSP M fitting which pre-assembled in the factory, and can be plugged when this channel is empty
5	CH2 port	Configurable gauge pressure module, 1/8 BSP F fitting with an 1/4 BSP M fitting which pre-assembled in the factory, and can be plugged when this channel is empty
6	CH3 port	Configurable gauge pressure module, 1/8 BSP F fitting with an 1/4 BSP M fitting which pre-assembled in the factory, and can be plugged when this channel is empty
7	Pressure reference level	Reference level mark of internal pressure sensor
8	CH4, CH5	Lemo ports for external ADT161 pressure modules
9	USB	For USB stick or peripherals
10	LAN1, LAN2	Ethernet port 100/1000Mbps
11	HDMI	For display extension
12	DC28V	Power supply port
13	Battery lock	Lock the battery, slip to unlock and remove the battery
14	Li-ion battery(Optional)	Lithium ion battery, can be charged independently
15	Supporting feet	Support the device to 20°

3. Main Display

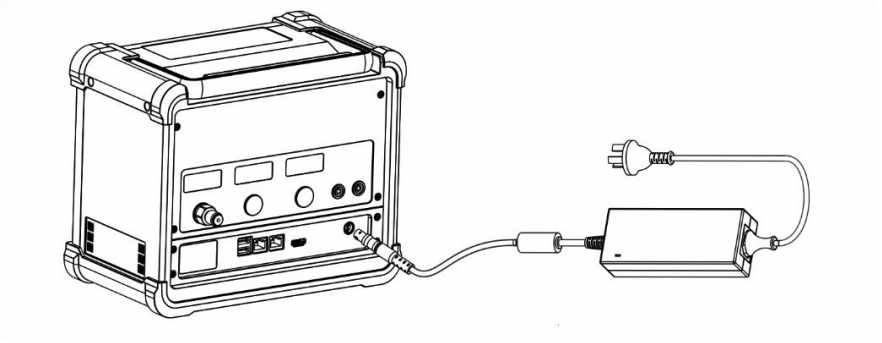


* The display may differ by model and configuration. Please refer to the actual product.

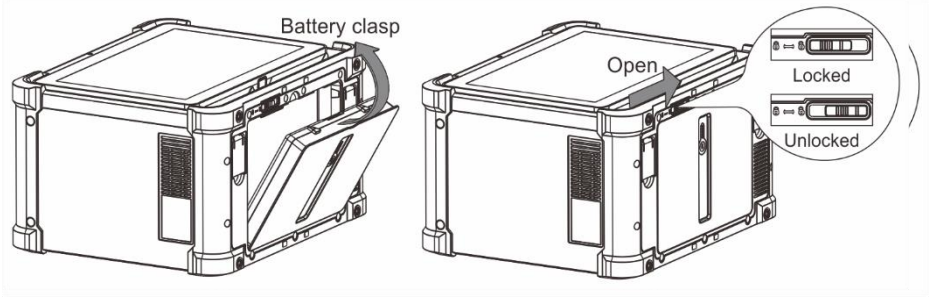
No.	Name	Description
1	Channel online display	Display the current online modules in icon form and allow control over the visibility status of channels.
2	Real time pressure	To display real time pressure value of channel
3	Status bar	Time and date: It is system time
		: WIFI status,shows status of WIFI and signal
		: LAN connection, indicates LAN connected
		: indicats USB devices connected
		: Show current battery status and level.
4	Setup	Includes settings for modules, communication, services, personalization and system
5	Application	Provides various applications
6	Channel	Display up to 5 channels; when there are 4 channels or more, the auxilary information will be hiden
7	Range	Supported switch pressure range
8	Auxiliary information display	Click to select any four of the items to be displayed
9	Unit	Click to switch pressure unit
10	Module settings	Set module type, unit, resolution, stability, filter…
11	Zero	Perform Zeroing when the zero condition is met.
12	Enabled functional icon	Stability, head correction, filter, Tare

4. Power Adapter

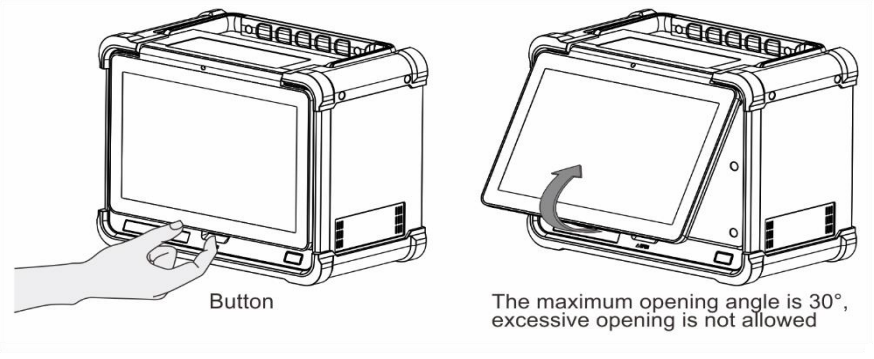
4.1 Power adapter



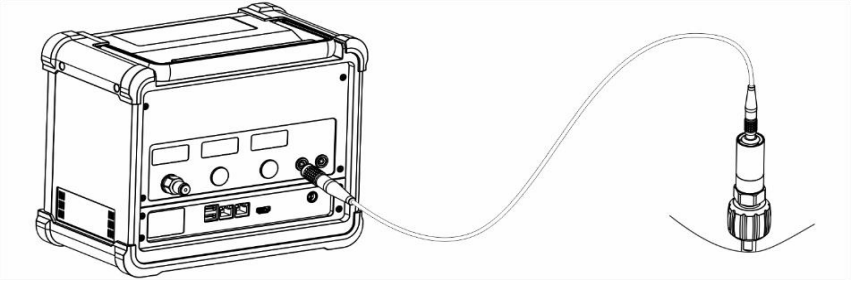
4.2 Li-ion battery (optional)



5. Screen Flipping



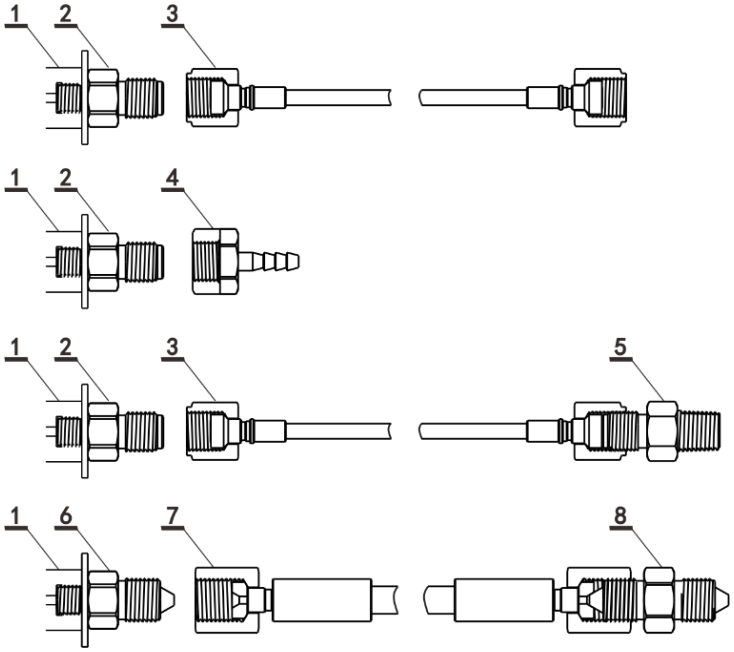
6. Connect to External Sensors



* The external pressure sensor in this picture is optional accessory. If needed, please contact Additel to order.

7. Pressure Connection

The ADT715 series is equipped with male pressure fitting, please refer to below picture for typical connection types.



ADT715-BP fittings configuration

No.	Description	Fitting type
1	Built-in pressure fitting	1/8 BSP F
2	Pre-assembled fitting of barometric module	1/4 BSP M
3	Pressure hose of barometric module	1/4 BSP F at both sides
4	1/4 BSP F pressure fitting	1/4 BSP F to another M type

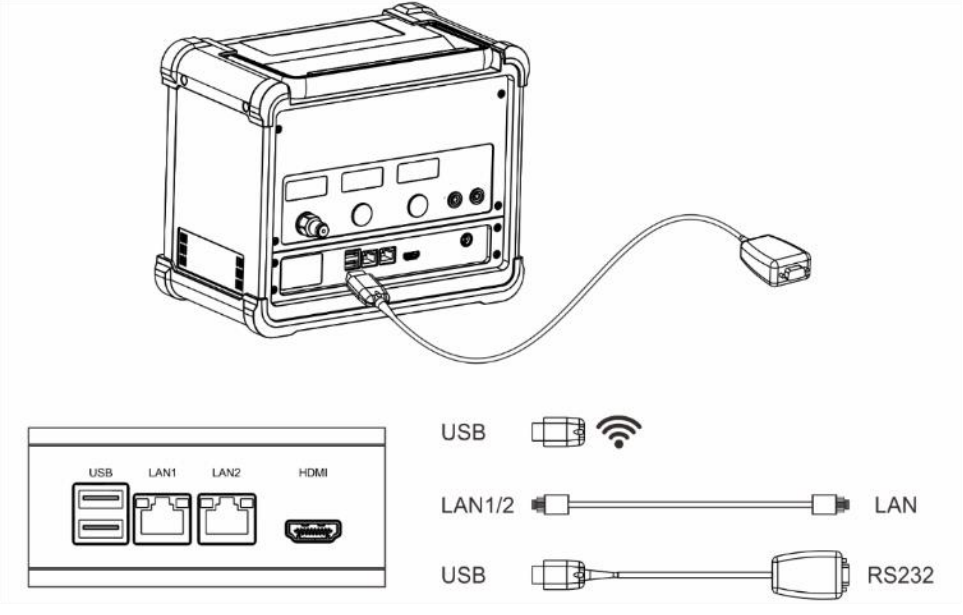
Note: The ADT715-BP has one pressure hose with 1/4 BSP F fitting at both sides, and one 1/4 BSP F to barb fitting adapter. If you need other types of adapters, please contact Additel to order.

ADT715 fittings configuration

No.	Description	Fitting type
1	Built-in pressure fitting	1/8 BSP F
2	≤700 bar (10000psi) Pre-assembled pressure fitting	1/4 BSP M
3	≤700 bar(10000psi) Pressure hose	1/4 BSP F at both sides
5	Pressure fitting 1/4 BSP M	1/4 BSP M to other M type
6	＞700 bar(10000psi) Pre-assembled pressure fitting	1/4 HP M
7	＞700 bar(10000psi) Pressure hose	1/4HP F at both sides
8	Pressure fitting 1/4 HP M	1/4 HP M to other M type

Note: For the ADT715, please choose proper pressure fittings and hoses according to the pressure module. Please contact Additel for more details.

8. Communication Connection and Setting



Note: The ADT715 only supports the use of one RS232 cable for communications. For using LAN and WIFI, please check from the user manual.

* The wireless network adapter and RS232 communication cable are optional accessories. If needed, please contact Additel to order.

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