THORCAL CALIBRATION SERVICES

Additel

Metrology Made Simple

Additel 295
Field Device Communicator

- **HART, FOUNDATION Fieldbus & Profibus PA Support**
- **No External Power or Resistors Required**
- **FREE wireless DD library updates—no subscription required**
- **0.01% RD + 1.5 µA Current Measurement Accuracy**
- **Latest FDI Technology for Broad Device Compatibility**
- **Integrated High-Precision Loop Diagnostics**
- **Field-Tested for Speed and Ease of Use**
- 20 hour battery life - continuous use
- 5-inch color touchscreen & physical buttons - glove compatible
- ISO 17025-accredited Calibration w/data Included

OVERVIEW

The ADT295 Field Device Communicator is a versatile, all-in-one solution for configuring, calibrating, diagnosing, and managing HART®, FOUNDATION™ Fieldbus, and Profibus PA instruments. Designed for industrial process applications, it supports transmitters, positioners, and other field devices used across the oil & gas, chemical, power, and process industries.

With both online and offline operating modes, the ADT295 communicates directly with installed field devices during operation while also supporting calibration, testing, and troubleshooting in metrology laboratories, instrument shops, and maintenance facilities. Integrated loop power and advanced diagnostic capabilities eliminate the need for external power supplies, resistors, and other accessories, allowing technicians to complete more tasks with a single handheld device.

Electrical Signal Port

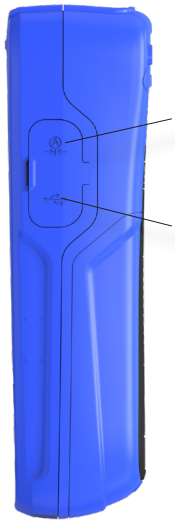
Pressure Module Input

Hang Strap Lug

Battery Pack

Touchscreen

Textile Keypad



Digital Connector Port

USB Port

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Rev # 20261014

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Features

Field-Tested Speed and Usability

In the field, every extra second spent waiting on a device is time wasted that could be used for other tasks. Early trials of the ADT295 point to real gains here: testers consistently describe device communication and menu navigation as noticeably faster than what they're used to with other handheld communicators. The difference traces back to how the interface was built, organized around real technician workflows rather than underlying protocol architecture, so common tasks take fewer steps to complete. Testers have specifically pointed to routine calibration checks as an area where the streamlined navigation saves noticeable time

FREE DD library updates - no fees or subscriptions

Additel doesn't charge a fee or a subscription for DD library or firmware updates — there's no support contract required just to keep the communicator current. With pre-installed libraries supporting over 2,600 HART, FOUNDATION Fieldbus, and Profibus PA devices, the ADT295 is ready to communicate with a wide range of field instruments right out of the box.

Built-in Wi-Fi and Bluetooth keep the ADT295 connected without extra hardware. As new devices come to market, a one-click update over Wi-Fi refreshes the DD library directly on the unit, with no computer, no IT involvement, and no complicated procedure required. Whether it's a routine library refresh or a firmware update, the process stays the same: connect, download, and the ADT295 is ready for the next device in your plant.

Comprehensive Process Signal & Pressure Calibration

Designed to streamline field calibration, the ADT295 supports autoranging voltage measurement, current measurement, current output, and an integrated 24 V loop power supply for testing and calibrating AI and AO cards, all from a single handheld. Voltage and current readings are accurate to 0.01% RD, and the loop power supply outputs 24 V with up to 30 mA of drive capacity, enough to power a transmitter directly during testing without sourcing external power. Every unit ships standard with a traceable, ISO/IEC 17025-accredited calibration, so it's ready to use as a reliable reference from day one.

By connecting an external Additel digital pressure module, users can also calibrate pressure transmitters, reducing the need for multiple instruments and improving maintenance efficiency.

Intuitive Touchscreen Interface

The ADT295 gives technicians a choice in how they work. Its 5-inch color touchscreen and physical keypad are both fully operable while wearing gloves, so you can tap through menus when that's quickest or navigate by keypad if you prefer the feel of physical buttons. Not every technician wants a touch-only device, and the ADT295 doesn't force the choice. Adjustable backlighting and selectable light and dark themes optimize screen visibility across varying ambient lighting conditions, ensuring clear readability even in direct sunlight. The easy-to-use, intuitive interface is similar to navigating a cell phone, providing functions and features with a simple selection

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Integrated Pressure Calibration & Device Communication

The ADT295 streamlines pressure transmitter calibration by allowing users to communicate with the device while simultaneously acquiring reference pressure data from a connected Additel digital pressure module. This enables efficient on-site comparative calibration without interrupting device communication, reducing testing time and simplifying field maintenance. The communicator supports one external Additel ADT161 Digital Pressure Module, available as an optional accessory. The ADT161 family covers gauge, compound, differential, and barometric measurements, with ranges from vacuum up to 60,000 psi (4,200 bar) and differential ranges as low as ±1 inH^2O. Accuracy options span 0.1% FS on the highest ranges to 0.01% FS on gauge and compound modules through 15,000 psi. Precision sensors reach 0.01% of reading or 0.005% FS, whichever is greater. Every module ships with an ISO 17025 accredited calibration certificate, so you can match the reference to the transmitter under test.

Rugged Design for Field Use

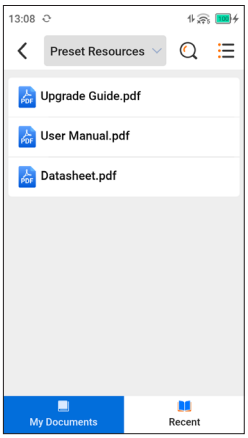
Field work doesn't happen in a lab, and the ADT295 is engineered accordingly. At just 1.8 lb (0.8 kg) and 7.6 × 3.8 × 2.2 in (192.3 × 96.5 × 55.3 mm), it's compact and light enough to carry all day, so ruggedness doesn't come at the cost of portability. Protected electrical test ports guard against accidental 220 V contact, so a moment's inattention is unlikely to take the ADT295 out of service. The display is covered in rugged tempered glass that resists scratches and impacts from the daily wear of a tool bag or work belt, paired with a bright, sunlight-readable touchscreen that stays legible whether you're in a dim equipment room or out on an open platform at midday.

The IP54-rated enclosure keeps dust and moisture out, and the ADT295 backs that up with real environmental testing: the unit is rated to survive a 1-meter drop test, along with 5 g vibration and 8 g mechanical shock testing, and it holds up to 48 hours of salt spray exposure, a meaningful bar for coastal, offshore, and marine process environments. Combined with an operating range of -20°C to 50°C, the ADT295 is built to keep working through the conditions that put lesser handhelds out of commission, wherever the job takes you. Each unit is also covered by a 1-year warranty.

Integrated Document Management & File Sharing

The ADT295 transforms the communicator into a powerful onsite information hub, allowing users to store and access important documents, videos, images, and technical resources directly in the field. With 64 GB of onboard storage, there's ample room to carry manuals, wiring diagrams, work instructions, calibration records, and reference material for an entire plant.

An intuitive file management system keeps everything organized and easy to find, so technicians spend less time searching and more time working. High-speed Bluetooth transfer enables quick sharing between devices and team members, letting a technician hand off documentation or updated files on the spot without needing a network connection or returning to a workstation. By keeping critical resources available anytime and anywhere, the ADT295 helps technicians work faster, troubleshoot more effectively, and minimize interruptions.



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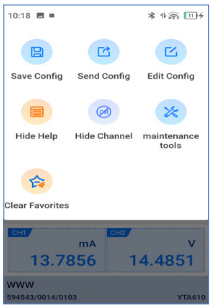
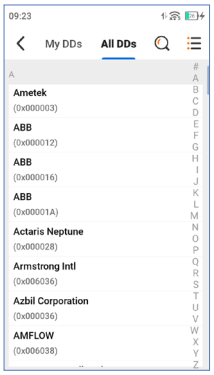
Advanced Device Configuration & Management Features

The ADT295 combines essential field communicator functions with enhanced tools designed to simplify device setup, troubleshooting, and maintenance. Standard capabilities include DD menu navigation, parameter configuration, test methods, data trending, help resources, library browsing, customizable hotkeys, favorites management, configuration storage, and offline simulation. Additional features such as full-screen help, complete parameter backup and restoration, frequently used DD favorites, device connection history, and integrated calibration signal generation further improve workflow efficiency and provide technicians with a more powerful and convenient field solution.



FREE Product & Application Support

Support is included with every ADT295. Additel provides product and application support at no charge, the same way we do for all of our equipment, with no support contract or subscription required. Whether you have a question about setting up a calibration, need help with a HART or FOUNDATION Fieldbus device, or want guidance on getting the most from the communicator in your plant, you can reach a knowledgeable team without a service fee. Service is something Additel customers mention to us often, and it reflects how we run the business. Quality products, responsive customer service, and innovative engineering have always been our priorities, and we stand behind every customer with competitively priced products and dependable technical support.



General Specification

Specification	ADT295
System	Android OS, 8 core
Storage	64 GB
Display	5.0-inch 720×1280 LCD capacitive touch screen, 60Hz refresh rate
Dimensions	7.6 × 3.8 × 2.2 in (192.3 × 96.5 × 55.3 mm)
Weight	1.8 lb (0.8 kg)
Keys	1 power key, 8 function keys
Power Supply	Standard 6900 mAh rechargeable lithium battery; optional 10000 mAh high-capacity battery
Charging	Type-C charging port; use dedicated 5 V adapter; approx. 2.5 hours full charge time
Battery Runtime	Measurement mode (24 V off, measurement only): about 20 hours Output mode (24 V enabled, 12 mA output): about 14 hours
Environment	Rated accuracy range: 8 °C ~ 30 °C
	Operating temperature: -20 °C ~ 50 °C
	Storage temperature: -20 °C ~ 70 °C
	Charging temperature: 0 °C ~ 45 °C
Humidity	0% ~ 95% RH, non-condensing
Altitude	3000 meters
Port Withstand Voltage	Typical 60VAC max; automatic protection against accidental 220 V input with no device damage
Compliance	CE
Protection level	IP54; passes 1-meter drop test
Vibration	5 g low-frequency & high-frequency vibration test
Shock Resistance	8 g mechanical shock test
Salt Spray Test	48-hour salt spray resistance
User interface location	English, German, French, Italian, Spanish, Portuguese, Simplified Chinese, Traditional Chinese, Japanese, Russian
Communication Interfaces	USB2.0 Type-C (host/slave compatible), Bluetooth, Wi-Fi, NFC
Warm-Up Time	Instant operation; no warm-up required
Isolation Design	USB communication port electrically isolated from measurement terminals; safe for simultaneous USB connection and field testing
Warranty	1 year

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Technical Specification

Ambient temperature: 20 °C ±10 °C, 1-year accuracy guarantee

Signal Type	ADT295		
	Range	Resolution	Accuracy
Voltage Measurement (Auto-Ranging)	-1 V ~ 1 V	10 μV	0.01% RD + 50 μV
	1 V ~ 30 V	0.1 mV	0.01% RD + 1.5 mV
Current Measurement	± 30 mA	0.1 μA	0.01% RD + 1.5 μA
Current Output	0 mA ~ 24 mA	0.5 μA	0.01% RD + 1.2 μA
Loop Power Supply	Output: 24 V ± 5%, Max load current: 30 mA		

Notes:

Temperature coefficient: ± 5 ppm FS/°C when ambient temperature ranges from -20 °C ~ 8 °C and 38 °C ~ 50 °C, the guaranteed specification temperature range: 8 °C ~ 38 °C.

Voltage input range: -1 V ~ 30 V, input impedance > 20 MΩ

Current input & output impedance < 10 Ω, suitable for measuring transmitter TEST terminal current

Loop power: Max open-circuit voltage 24 V, driving capacity for 1 kΩ / 20 mA; power supply for the transmitters.

Model Selection Table

Model Type	ADT295	
	Function	Description
ADT295	HART+ WIFI+BLE	Supports HART communication and loop diagnosis
ADT295-FF	HART+FF+WIFI+BLE	Supports HART + FF communication and loop diagnosis
ADT295-FF-PA	HART+FF+PA+WIFI+BLE	Supports HART + PA + FF communication and loop diagnosis

[1] Base model. All ADT295 models ship with the full standard accessory kit listed below, including the ISO 17025-accredited calibration certificate.
[2] Adds FOUNDATION Fieldbus communication on top of the base HART platform.
3) Adds Profibus PA communication on top of HART and FOUNDATION Fieldbus.

ORDERING INFORMATION

Model Number

ADT295

ADT295
ADT295-FF
ADT295-FF-PA

Standard Accessories			
Model number	Description	QTY	Picture
9811-X	110V/220V external power adapter	1 pc	
9705	Chargeable Li-ion battery	1 pc	
9019	Integrated dual-branch test cable kit w/ alligator clips and flexible electronic probes	1 pc	
9031	Small Multimeter Test Hooks	2 set (4 pcs)	
9052	USB Cable type A to type C	1 pc	
9040	Hanging strap with magnet	1 pc	
9041	Hanging hook	1 pc	
	ISO 17025 accredited calibration certificate	1 pc	

Optional Accessories			
Model number	Description	QTY	Picture
9919-295	Carrying case	1 pc	
9919EX-295	Carrying case	1 pc	
9263	Protective Field Sleeve for ADT295	1 pc	
ADT161	Intelligent digital pressure modules	1 pc	