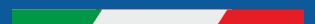




MADE IN ITALY



Wireless vehicle identification and data download systems

ATD00525 Rev. 2_09/26

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1 CERTIFICATIONS AND ABOUT US

1.1 Certifications

The equipment is certified in accordance with applicable regulations based on its intended use. The symbols used and their corresponding references are listed below.

COMPANY CERTIFICATIONS



ISO 9001 Quality Management System Certification



Quality Declaration for Production in Accordance with the ATEX Directive 2014/34/EU



Quality Declaration for Production in Accordance with the MID Directive 2014/32/EU



17020 : 2012

Certificate of Accreditation for a Type C Inspection Body in accordance with UNI CEI EN ISO/IEC 17020:2012

PRODUCT CERTIFICATIONS



EU Declaration of Conformity



ESTI Certificate
(for equipment intended for the Swiss market)



ATEX Certificates



Ministerial certificate
(for Category C diesel-powered equipment)



MID Certificates



Certification for equipment used
in motor vehicles

Note: Unless otherwise indicated, the products in this catalog comply with EU regulations

Some of the products listed in the catalog are protected by intellectual property rights and/or industrial property rights. Assytech reserves the right to take all legal measures available to it to safeguard its rights in the event that third parties commit serious acts infringing upon the intellectual property rights and/or industrial property rights belonging to Assytech.

1.2 About Us

Assytech Srl, founded in 1997, is a dynamic company born from the combination of diverse professional skills and experience in the oil and gas sector.

For years, it has been the primary manufacturer of fuel dispensers for Nuovo Pignone and General Electric.

Specializing in the design and manufacture of fuel dispensers, electrical power distribution systems, and refueling management equipment, Assytech is not just a supplier but a partner in providing flexible services, technology, and products that meet all customer requirements.

Assytech offers technical support throughout Italy, either directly or through authorized installers.



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2 CPT03119 WIRELESS RFID READER



DESCRIPTION

The RFID reader kit for fuel dispensing automation systems is available in two versions: for fuel nozzles (A) and a handheld version (B).

The model designed for installation on fuel nozzles is compatible with the ELAFLEX ZVA25 and ZVA SL2 models.

The RFID reader kits are available in the standard version (with an antenna built into the nozzle body) or in the high-sensitivity HS version (with an external antenna). The HS version is suitable for use with vehicles whose fuel tank filler neck is difficult to reach.

TECHNICAL SPECIFICATIONS

Power Supply	+3,6 V, +7,2 V
Battery pack	7,2 V 2,6 Ah (Complies with EN 60079-11)
Autonomy	2-8 years
RFID reading frequency	134 kHz
Data transmission rate	868 MHz
Flow rate	10 m
N. of channels	8

DEVICES CODES

CPT03119	/Version
	/1: handheld unit
	/2: for ZVA SL2 nozzle (High Sensitivity)
	/3: for ZVA 25 nozzle (High Sensitivity)
	/4: for ZVA 25 (Standard)
	/5: for ZVA SL2 nozzle (Standard)
	/6: for ZVA SL2 GR nozzle (not available)
	/7: for ZVA AdBlue® nozzle

ACCESSORIES

	Code	Description
	AT12717/02/04	Programming Kit: Gun No. and Lane No.
	-	Replacement battery kit

3 AT02022 SERIES RECEIVER

DESCRIPTION

The radio data transmission and reception unit, connected to the AT04/ AT07 series yard management terminal, enables communication with the vehicle radios installed on vehicles for the collection of data such as kilometers, hours, pulses, etc.

It also allows for the reading of up to 16 fuel nozzles (CPT03119) equipped with an RFID transponder reader, installed on the tank inlets for vehicle recognition during the fuel dispensing authorization phase.



TECHNICAL SPECIFICATIONS

Power Supply	9 ÷ 30 VDC
Max. consumption	500 mA
Digital inputs	2
Digital outputs	2 PNP (9÷30 Vcc 50 mA)
Radio frequency	868 ÷ 915 MHz
Antenna connector	SMA F
N. of channels	8
Operating temperature	-20°C ÷ +60°C

DEVICE CODES

AT02022	/Communication	/Version
	/1: RS485 /2: RS232	/A: basic radio /T: Yard terminal kit (radio + power supply/data cable) and mounting accessories

ACCESSORIES

	Code	Description
	AT20217	Outdoor dome antenna
	AT20916	12 VDC Flashing Light
	AT09915	12-VCC traffic light module with common node
	AT01011/25	RS232 Power Supply/Data Cable
	AT01011/30	RS485 Power Supply/Data Cable
	AT01011/31	Radiobase/RS485 serial cable

4 RFID TAG

DESCRIPTION

This series of RFID tags, complete with mounting brackets for attachment to the fuel filler neck of vehicles such as buses, trucks, and cars, when paired with the CPT03119 RFID reader mounted on the fuel nozzle, enables vehicle identification. In addition, it automatically activates and deactivates the pump, limiting fuel dispensing as much as possible to tanks or containers without an RFID tag.

TECHNICAL SPECIFICATIONS

Features	READING AND WRITING
Memory (bits)	64
Operating frequency	134,2 kHz
Modulation	FSK 134,2 / 123,2 kHz
Transmission	HDX (Half duplex)
Power Supply	Powered by the read signal (no batteries required)
Reading range	2÷5 cm
Max temperature	-40 to +85 °C; (-25 to +85 °C during operation)
Protection class	IP68
Available versions	R: read-only W: rewritable

4.3 Integrated RFID tag for FAST, FARM, and Mito 1° series caps



RFID tags to be installed on:



MITO 1 Series
Cap



FARM/FAST
Quick-Connect Cap

DEVICES CODES

AT07919	/Version
	/R: read-only /W: read/write

4.4 RFID tag embedded in the cap



AT09919 series for
M80 threaded plug

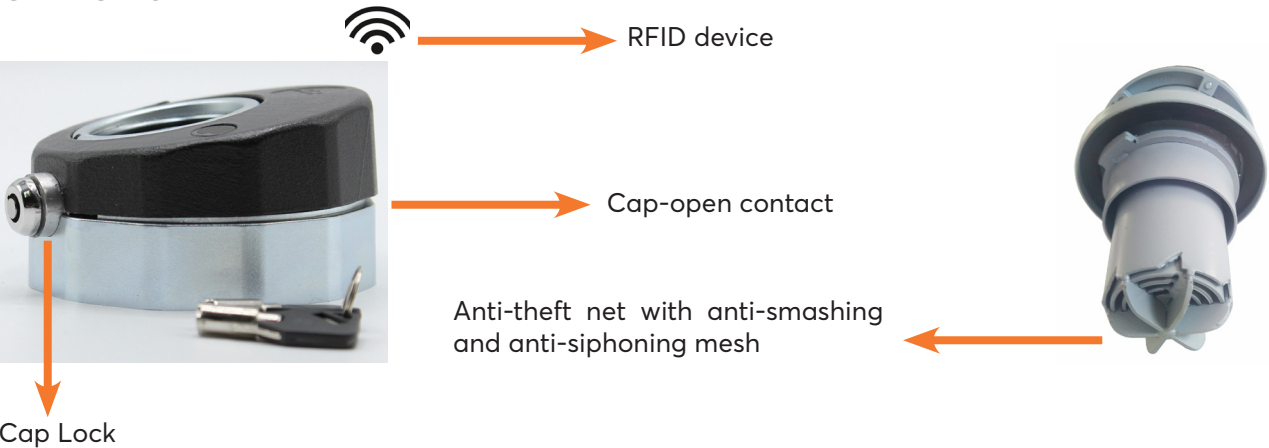


AT12321 series for
M105 threaded plug



Installation example

OPTIONS



TANK ADAPTERS



M80/F105 Straight Adapter,
Part No. AT10120



Angled M80/F105 Adapter, Part
No. AT10220



SCANIA M80/M65 Adapter
Part No. AT10320

DEVICES CODES

AT09919 AT12321	/Anti-theft net	/RFID	/Anti-theft contact	/Lock
	/0: ABSENT /1: PRESENT	/0: ABSENT /1: READING/WRITING /2: READ-ONLY	/0: ABSENT /1: OPEN+TAMPER /2: OPENING /3: SAFE CAP	/0: ABSENT /1: PRESENT

4.5 Disc-shaped RFID tags for buses and trucks

TYPE 1 - Direct Mounting



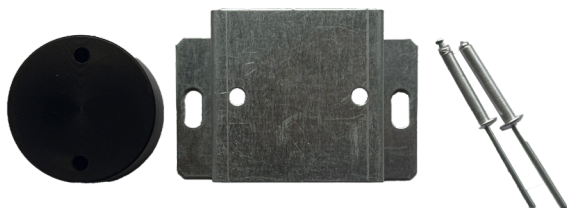
TRANSPONDER 42x15 + 2 RIVETS 4x22

CODE: AT07224/R/0
CODE: AT07224/W/0



Installation example

TYPE 2 - 12mm H-shaped channel



TRANSPONDER 42x15 + OMEGA STANDARD + 2 RIVETS 4x22

CODE: AT07224/R/1
CODE: AT07224/W/1



Installation example

TYPE 3 - 50 mm H omega channel



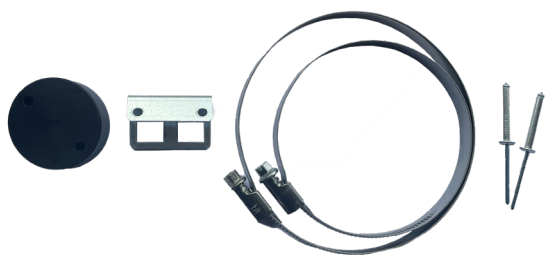
TRANSPONDER 42x15 + OMEGA 50MM + 2 RIVETS 4x22

CODE: AT07224/R/2
CODE: AT07224/W/2



Installation example

TYPE 4 - Universal



TRANSPONDER 42x15 + ANGLED BRACKET +
CLAMPS 70-90 AND 90-110 + 2 RIVETS 4x22

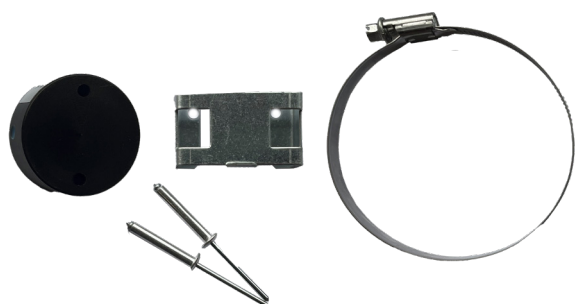
CODE: AT07224/R/4

CODE: AT07224/W/4



Installation example

TYPE 5 - For CAF caps



TRANSPONDER 42x15 + BRACKET WITH NOTCH +
CLAMP 70-90 + 2 RIVETS 4x22

CODE: AT07224/R/3

CODE: AT07224/W/3



Installation example

4.6 RFID tags for cars



TRANSPONDER 20x20 + 1 RIVET 3.8x25

CODE: AT02916/R/2



Installation example

5 AT01822 DATA TRANSMITTER

DESCRIPTION

The VR22 vehicle radio, installed on mobile vehicles, allows for:

- vehicle identification within a defined area;
 - the collection of various measurements, including fuel level, odometer reading, and distance traveled;
 - recording of fuel dispensed during refueling driver ;
- identification via a transponder card reader;

The data collected is downloaded from the AT02022 receiver while the vehicle is stationary or during refueling. Additional options, such as a local display and a magnetic card reader, allow for use in a variety of applications.



TECHNICAL SPECIFICATIONS

Power Supply	9 ÷ 30 Vcc
Max. consumption	500 mA
Digital inputs	2
Digital outputs	2 PNP (9÷30 Vcc 50 mA)
Radio frequency	868 ÷ 915 MHz
Antenna connector	SMA F
N. of channels	8
Operating temperature	-20°C ÷ +60°C

DEVICE CODES

AT01822	/Version
	/C: CAN bus connection /I: pulse reading

ACCESSORIES

	Code	Description
	AT02022	Receiver
	AT04305	Adhesive glass antenna
	AT10012	90° angle rod antenna
	AT05505	Badge reader
	AT09612/XX	Standard VR22 radio connection cable (XX=m)
	AT03424/XX	Can Bus Cable (XX=m)
	AT11512	Programming cable
	CPTS01412	Firmware update software
	CPTS01905	Software for configuring car radios

6 SECURE CAP

Secure Cap is a wireless solution that allows for remote monitoring of the opening of vehicle fuel tank filler caps. The AT01524 transmitter, connected to the AT12321/X/X/3 X alarm-equipped cap, sends a signal to the AT01624 receiver when the cap is opened or if there is an attempted tampering. As an alternative to the fixed receiver, the portable version with CODE AT01924 is available.

AT01524 Transmitter



DESCRIPTION

This device, integrated into the alarm-equipped fitting, sends an opening warning or alarm signal to the AT01624 receiver. It is powered by a replaceable AA battery.

TECHNICAL SPECIFICATIONS

Power Supply	2 AA batteries
Autonomy	At least 3 years
Flow rate	25 meters

AT01624 Receiver



DESCRIPTION

Installed in the vehicle's cab, it features a visual status indicator and an audible alarm. In the event of an alarm or when the alarm is cleared, a text message is sent to one or more preset phone numbers via a GPRS connection. It also has two voltage-free contacts for connecting to alarm devices already installed on the vehicle.

TECHNICAL SPECIFICATIONS

Power Supply	10-30 Vcc
Consumption	max 30 mA
Flow rate	25 meters
Remote alarm	Via two voltage-free contacts: lid opening and tampering

SPARE PARTS

Code	Description
AT06125	AA battery for the AT01524 transmitter

7 EXAMPLE OF HOW IT WORKS

7.7 WITH RFID TAG READING



7.8 WITH RFID TAG READER AND WIRELESS ALARM





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**HEAVY-DUTY FUEL
STATION EQUIPMENT**

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