



Department of Environmental Protection

2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form: 62-761.900(9)

Form Title: Storage Tank Equipment

Registration Form

Effective Date: July 2019

Incorporated in Rule 62-761.850, F.A.C.

Storage Tank System Equipment Registration Form

Fill out completely

General Information

Company Name: Franklin Fueling Systems Contact Name: Bradley Fawcett
Company Address: 3760 Marsh Rd. City, State: Madison, WI. Zip: 53718
E-mail: bradley.fawcett@franklinfueling.com Contact Number: 1-608-838-5650
Product Name: EVO6 Series Fuel Management System
Model Number(s): EVO600, EVO6000, Product Type: Fuel Management System
Rule(s) citation that registration is being requested within Chapter 62-761 (UST), and/or 62-762 (AST),
62-761.600, 62-7612.601 F.A.C.

F.A.C.: Write a brief description of equipment registration request including product limitations:

EVO™ 600 & EVO™ 6000 Automatic Tank Gauges (ATGs) provide highly accurate inventory management and containment monitoring with a modular design that allows customer to customize the system to suit their needs. Both ATGs feature the capability to interface with probes, sensors, relays, and other I/O devices in a variety of configurations. Both systems are NWGLDE listed for tank and line leak detection as well as sensor monitoring.

Information Checklist (Choose Yes, No, or N/A - Not Applicable):

	Yes	No	N/A
1. Third-party Certification by a Nationally Recognized Testing Laboratory? (Required)	☒	☐	☐
2. Documentation of third-party evaluation that the equipment meets DEP Rules?	☒	☐	☐
3. Documents included about the qualifications of the Nationally Recognized Testing Laboratory?	☒	☐	☐
4. Technical information and drawings included?	☒	☐	☐
5. Installation instructions included?	☒	☐	☐
6. Annual Operability Testing Requirements (Rules 62-761.500, 62-762.501, & 62-762.502 F.A.C.)?	☒	☐	☐
7. Integrity Testing Requirements (Rules 62-761.700, 62-762.701, & 62-762.702, F.A.C.)?	☒	☐	☐
8. Compatible with fuel blends containing >10% ethanol or >20% biodiesel?	☒	☐	☐
9. Has the product been approved or registered in other countries or states? (If so provide list)	☒	☐	☐
10. Any requirements for company-certified installers or trainers?	☒	☐	☐
11. Was this product(s) previously approved or registered by the Department? If yes, EQ- _____	☐	☐	☒
12. Any changes or modifications to the equipment since the last submittal to DEP?	☐	☐	☒

Document Information: Provide supporting documents indicated as "Yes" above including this form via email to Tanknotify@floridadep.gov, or documents can be sent to FDEP, Division of Waste Management, 2600 Blair Stone Road, MS 4560, Tallahassee, FL 32399.

Write a brief description of equipment installation and performance in the U.S.:

Installation and programming of the EVO™ 600 & EVO™ 6000 ATGs requires a Franklin Fueling Systems certified technician and should be performed in accordance with any local, state, or federal regulations. The ATGs should be mounted in a location that is classified as non-hazardous and at a level for convenient access. Once installed and programmed the system will monitor and report on configured devices, providing details and reports regarding the status of those configured device.

Equipment Registration Certification:

To the best of my knowledge and belief, all information submitted on this form is true, accurate and complete.

Matthew Kirby, Product Support Engineer

Printed Name and Title

Kirby, Matt

Signature (right click to sign)

Digitally signed by Kirby, Matt
Date: 2020.11.03 15:32:19 -05'00'

Date

For Department Use Only:

Date Application Received: 11/03/2020 Application complete: Yes: ☒ No: ☐

EQ- 947 Date of complete or incomplete letter sent: 11/04/2020 Date Equipment Requires Renewal: 11/4/2025

Storage tank system equipment requires renewal every 5 years in accordance with subsection 62-761.850(2), F.A.C.

EU-TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

EU-Type Examination Certificate Number: **DEMKO 05 ATEX 0430464X Rev. 3**

Product: **Associated Apparatus, Flammable Liquid Level Gauge/Leak Detection System**

Manufacturer: **Franklin Fueling Systems/Intelligent Controls Inc.**

Address: **34 Spring Hill Road, PO Box 638, Saco, ME 04072 USA**

This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report no. **4788435934.4.1**

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013

EN 60079-11:2012

If the sign "X" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

The marking of the product shall include the following:

II (1) G [Ex ia Ga] IIA

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2005-10-12

Re-issued: 2018-11-30



Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

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Schedule

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 05 ATEX 0430464X Rev. 3

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Description of Product

The TS-5000, TS-5000evo, TS-550, TS-550evo, TS-5, EVO600, EVO6000, TS-608, TS-EXPC, TS-EMS, and TS-EXPC2 are permanently mounted associated apparatus that provide intrinsically safe circuits for use in Group IIA. The units are designed to be mounted indoors in a non-hazardous location and connected to a suitable probe, 4-20 mA sensor, 2-wire sensor, 3-wire sensor, RS-485 sensor, 9V UDP sensor and 24V UDP sensor, or simple apparatus.

Nomenclature for type: $\frac{TS}{A} \frac{-5000}{B}$

A: TS- Base Model Number

Unit provides connection terminals for up to:

B:

- 5000 – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.
- 5000evo – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.
- 550 – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.
- 550evo – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.
- 5 – 12 probes, or 8 4-20 mA sensors, or 12 simple apparatuses or 8 3-wire sensors.
- 608 – 8 probes.
- EVO600 – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, 24 3-wire sensors, 24 RS-485 sensors, 24 24V UDP sensors, and 24 9V UDP sensors.
- EVO6000 – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors, 24 RS-485 sensors, 24 24V UDP sensors, and 24 9V UDP sensors.
- EXPC – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.
- EMS – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.
- EXPC2 – 36 probes, 24 4-20 mA sensors, 60 simple apparatuses, and 24 3-wire sensors.

Temperature range

The ambient temperature range is 0°C to +40°C.

Electrical data

Intrinsically Safe Parameters:

Maximum safe area voltage, $U_m = 250 \text{ V}$

Entity Parameters	Probe Module, Terminals Red / Black	4-20 mA Input Module, Terminal +/-	2-Wire Sensor Module, Terminal +/-	3-Wire Sensor Module, Red/White & Black	RS-485 Module, Terminal +/-	24V UDP Module, Terminal +/-	9V UDP Module, Terminal +/-
Uo	28.35 Vdc	26.25 Vdc	6.51 Vdc	7.71 Vdc	10.71 Vdc	27.51 Vdc	10.5 Vdc
Io	157.5 mA	98.2 mA	2.04 mA	573 mA	563 mA	153 mA	156 mA
Co	1.04 μF	1.25 μF	500 μF	500 μF	6.3 μF	1.04 μF	1.04 μF
Lo	1.4 mH	14.7 mH	100 mH	433 μH	500 μH	1400 μH	1400 μH
Po	1.1 W	0.64 W	0.0033 W	932 mW	1.22 W	1.05 W	410 mW

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Descriptive Documents

The scheduled documents are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

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Specific conditions of use:

- Device must be used and operated within an ambient temperature range of 0°C to 40°C.
- All openings (slots) must be provided with a module, place-holding cover, or the partition, which must be firmly screwed in place.
- The partition must be installed between the intrinsically safe modules and all other modules.
- During installation, extra care must be taken to ensure intrinsically safe field wiring is properly routed and secured, as necessary, so as to not be damaged when the cover is closed

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Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 05 ATEX 0430464X Rev. 3

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The Intelligent Controls EVO600/6000 has in addition passed the tests for Ingress Protection to IP 20 in accordance with EN60529:1991+A1:2000+A2:2013.



Franklin Fueling Systems

and/or



The trademark

may be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

CERTIFICATE OF COMPLIANCE

Certificate Number 20181207-MH16589
Report Reference MH16589-20050805
Issue Date 2018-DECEMBER-07

Issued to: INTELLIGENT CONTROLS INC
34 SPRING HILL RD
PO BOX 638, SACO ME 04072-0638

This certificate confirms that CONTROL, MONITORING AND AUXILIARY EQUIPMENT
representative samples of See addendum page

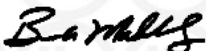
Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: See addendum page
Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number 20181207-MH16589
Report Reference MH16589-20050805
Issue Date 2018-DECEMBER-07

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Models:

Liquid Level Gauge/Leak Detection System,

Non-hazardous Location, associated apparatus:

*USL, CNL Liquid Level Gauge/Leak Detection System, Models TS-5000, TS-5000 evo, TS-550, TS-550 evo, TS-5, TS-EXPC, TS-608, TS-EMS, and TS-EXPC2, providing intrinsically safe circuits for use in Class I, Group D Hazardous Locations when installed in accordance with Control Drawing 000-1722 and Installation Manual No. 000-2150. Additionally, the 3-Wire Sensor Module has been evaluated as a System with the following liquid sensors, Model TSP-, followed by DIS, DDS, DTS, ULS, EIS, HIS, HLS-15 or -30, or MWS-15, -20 or -25 liquid sensors as specified in the Installation Manual No. 000-2150.

Liquid Level Gauge/Leak Detection System, Model(s) EVO600 and EVO6000, providing intrinsically safe circuits for use in Class I, Group D hazardous locations when installed per Control Drawing 000-228180035 and Installation Manual 000-228180033.

Standards:

##Standard No. UL 913,, Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations

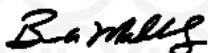
Standard No. UL 913, Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations

Standard No. UL 1238, Control Equipment for Use with Flammable Liquid Dispensing Services

Standard No. CAN/CSA C22.2 No. 157, Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

CAN/CSA-C22.2 No. 61010-1-12 Rev. 2016-04, SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE

##NOTE: The products are not yet fully upgraded to the UL Report to UL 913, Seventh Edition. Due to the intrinsically safe apparatus in the system evaluation, see explanation under GENERAL of Test Record No. 9. The Associated Apparatus covered with entity parameters comply with UL 913, Seventh Edition. All devices comply with UL 913, Fifth Edition and the other standards indicated above.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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EVO™ 600 & EVO™ 6000 AUTOMATIC TANK GAUGES

EVO™ 600 & EVO™ 6000 Automatic Tank Gauges (ATGs) provide highly accurate inventory management and full-featured compliance monitoring for any size fuel system. These module-based ATGs are highly configurable for site-specific probe and sensor requirements. Their simple setup and operation, remote connectivity, and advanced security features protect your fuel system while keeping you directly connected to vital site data whenever, and wherever. The highly-intuitive, full-color, icon-based touch screen provides user-friendly on-site access to inventory, alarm, and compliance data.



TECHNICAL ADVANTAGES

- Allows you to make informed, data-driven inventory management decisions while keeping your site in compliance and protected from security threats.
- Provides inventory monitoring, static (included feature) and continuous tank testing (optional feature), tank autocalibration, inventory reconciliation, containment compliance monitoring, and flow rate monitoring.
- With the EVO™ 600, six total modules can be installed with a maximum of four intrinsically safe modules and a maximum of three of any one kind of module. With the EVO™ 6000, eleven total modules can be installed with a maximum of nine intrinsically safe modules and a maximum of three of any one kind of module.
- Patented AutoLearn™ electronic line leak detection capability including Statistical Line Leak Detection for high throughput sites.
- Streamlined setup and programming includes hardware auto-detection and wiring confirmation, multipoint tank charting, network printer auto-detection, and the ability to download and upload entire programming profiles from one ATG to another.
- Intuitive full-color 7" (17.78 cm) touch screen interface provides simplified on-site access features including:
 - Six available One Touch buttons that are custom programmed to carry out common automated tasks with a single tap.
 - Quick Jump menu allows you to quickly maneuver from application to application using a single button.
 - Programmable product colors.
- Available with optional 24-hour Statistical Continuous Automatic Leak Detection (SCALD) and Turbine Pump Interface (TPI) capability for enhanced and automated submersible turbine pump control.
- Web interface allows you to directly connect to your ATG via FFS PRO® Connect from any web-enabled device.

Approvals/Certifications

- UL, cUL, ATEX, IECEx
- Third party certification of leak detection capabilities

SPECIFICATIONS

- Maximum tanks monitored: 36 (EVO™ 600)/36 (EVO™ 6000)
- Maximum sensor input capacity: 48 (EVO™ 600) / 96 (EVO™ 6000)
- Lines capacity: 24 (EVO™ 600 and EVO™ 6000)
- Dry contact input channels: 2
- AC input channels: 36 (EVO™ 600 and EVO™ 6000)
- Relay output channels: 26 (EVO™ 600) / 50 (EVO™ 6000)
- Connectivity: Ethernet, Wifi RS-485, standard USB (qty 2)
- Display type: 7" (17.78 cm) color LCD touch screen
- Printer type: thermal (also network or USB)
- Alarm: internal audible alarm
- LEDs: alarm, warning, and power
- Applicable liquids: petroleum, chemicals, and waste
- Level units: inches, centimeters, and millimeters
- Volume units: gallons or liters (mass with density option)
- Power requirements: 110 to 240 VAC, 50/60 hz, 1.5 Amps
- Operating temperature: 32° to 104 °F (0° to 40 °C)
- Humidity: 0-90% non-condensing
- EVO™ 600: Height 11.75"(300 mm), Width 10¼"(260 mm), Depth 9"(229 mm)
- EVO™ 6000: Height 11.75"(300 mm), Width 16½"(419 mm), Depth 9"(229 mm)

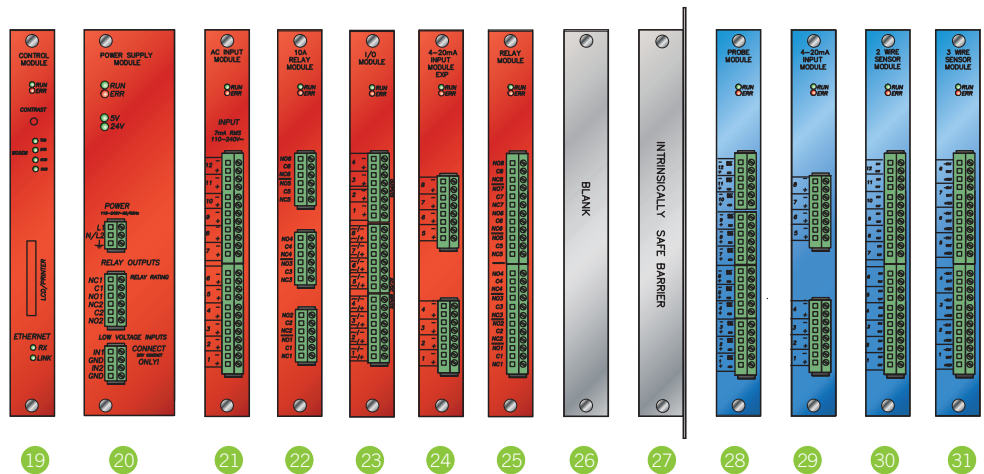
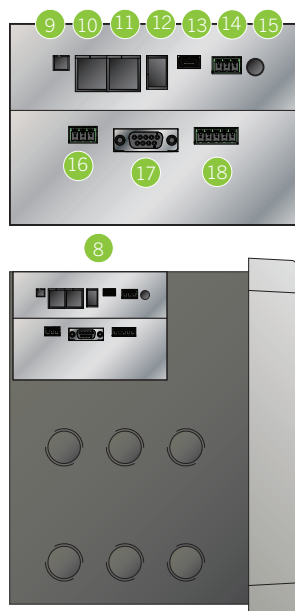
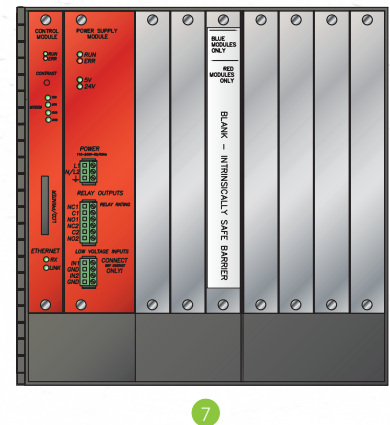
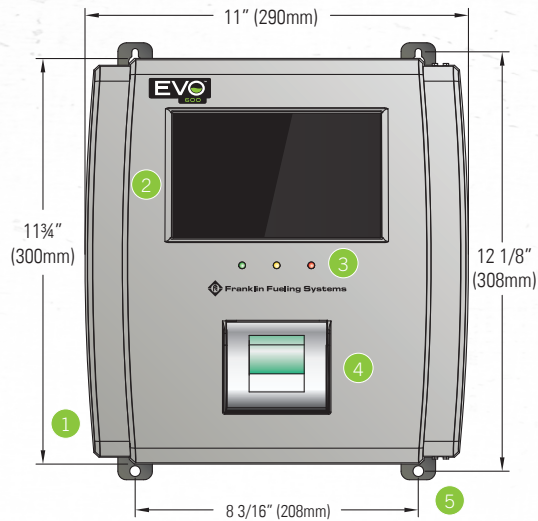
Capabilities

- High/low product, water, and temperature alarm set points
- Inventory reconciliation/tank autocalibration/flow rate monitoring
- Density, mass, and phase separation measurement
- Email and SMS notifications
- Back-up generator monitoring/conditions programming
- Advanced logic control for DEF/AdBlue® recirculation system
- MODBUS™ support

SPECIFICATIONS CONTINUED

Components

- | | | |
|-------------------------------|------------------------|-------------------------------|
| 1 Cover | 11 Ethernet port | 21 AC input module |
| 2 LCD touch screen | 12 USB ports (qty 2) | 22 10 Amp relay module |
| 3 LED indicators | 13 Mini-USB | 23 I/O module |
| 4 Printer | 14 Ground comm port | 24 4-20mA module EXP |
| 5 Mounting tabs | 15 Wi-Fi | 25 Relay module |
| 6 Cooling vents | 16 Bus extension | 26 Blank |
| 7 Module slots | 17 Serial comm port 2 | 27 Intrinsically safe barrier |
| 8 Communication ports | 18 RS-485 comm port | 28 Probe module |
| 9 Annunciator (audible alarm) | 19 Controller module | 29 4-20mA module |
| 10 Ethernet port | 20 Power supply module | 30 2 wire sensor module |
| | | 31 3 wire sensor module |



- There can only be three types of one module in an EVO™ Series ATG.
- If you require more than three types of one module, please contact your FFS sales representative to review your needs.
- The intrinsically safe barrier must be installed in the third slot or greater. (The third slot after the power supply module.)

ORDERING INFORMATION

Ordering Guide

ATG model, software and hardware options can be listed separately or combined when ordering. Systems shipped from the factory will list the combined part number. Complete part numbers have a specific order and are created using the following guidelines:

EVOX DPWIE / TRFLGC

EVOX = Base Model Options

EVO600 = EVO™ 600 base ATG

EVO6000 = EVO™ 6000 base ATG

DPWIE = Hardware Options (choose all that apply)*

D = Display

P = Printer

W = Wifi

I = Dispenser interface module

E = LON module

TRFLGC = Software Options (choose all that apply)

T = SCALD 24-hour tank testing

R or F = (R) Reconciliation/autocalibration or

(F) Reconciliation/autocalibration with flow rate monitoring

L or G = (L) Line leak detection or

(G) Generator line leak detection

C = Recirculation, scheduling, and timer conditions

*Only one EVO-DIM or EVO-LON module can be installed per ATG.

Example: EVO600DPI/TRL = EVO™ 600 base model with display, with printer, with dispenser interface module, with SCALD, with reconciliation/autocalibration, with line leak detection.

EVO™ 600 & EVO™ 6000 Base Models

Model	Description
EVO600	EVO™ 600 base model automatic tank gauge
EVO6000	EVO™ 6000 base model automatic tank gauge

EVO™ 600 & EVO™ 6000 Hardware & Software Options

EVO™ 600 and EVO™ 6000 ATGs come standard with the ability to perform in-tank static leak detection. The following software and hardware options can be added to customize your ATG. The internal hardware options will be factory installed when ordered with the ATG.

Internal Hardware Options

Model	Description
EVO-DIMIB	(I) Internal dispenser interface module, dispenser interface cable must be ordered separately
EVO-LON	(E) Lon™ communication module, IFSF protocol capability

Note: Only one EVO™-DIM or EVO™-LON module can be installed per ATG.

Internal Software Options / Field Upgrades

Model	Description
TS-TT	(T) Statistical continuous automatic leak detection, 24 hour continuous tank testing software
TS-TRAC	(R) Tank inventory reconciliation and autocalibration
TS-TRAC-F	(F) Reconciliation/autocalibration and flow rate monitoring software
TS-FLOW	Flow rate monitoring software (Field upgrade for ATGs with reconciliation/autocalibration)
TS-ELLD	(L) Electronic line leak detection
TS-ELLD-G	(G) Electronic line leak detection for generator applications
TS-CON	(C) DEF/AdBlue® recirculation, scheduling, and timer conditions

Expansion Consoles

Model	Description
EVO-EXPC2	Secondary console to add six additional plug-in modules to the primary EVO™ 600 or EVO™ 6000 ATG, comes without a display or printer
EVO-EXPC	Secondary console to add eleven additional plug-in modules to the primary EVO™ 600 or EVO™ 6000 ATG, comes without a display or printer

Note: Both of these consoles are for the EVO™ 600 and EVO™ 6000

Upgrade Kits

EVO™ Series Upgrade Kits include everything needed to transform the existing EVO 550™ or EVO™ 5000 to an EVO™ 600 or EVO™ 6000.

Model	Description
EVO-600UPG	Upgrade kit for EVO™ 550 to EVO™ 600, includes control module, comm port cover, and EVO 600™ jewel
EVO-6000UPG	Upgrade kit for EVO™ 5000 to EVO™ 6000, includes control module, comm port cover, and EVO™ 6000 jewel
EVO-600UPG-W	Upgrade kit for EVO™ 550 to EVO™ 600 with Wifi, includes control module, comm port cover, Wifi hardware, and EVO 600™ jewel
EVO-6000UPG-W	Upgrade kit for EVO™ 5000 to EVO™ 6000 with Wifi, includes control module, comm port cover, Wifi hardware, and EVO™ 6000 jewel