

FILLING STATION INTEGRATED LED SOLUTIONS

DISPLAY, LIGHT & INTEGRATED COMMUNICATION TECHNOLOGY

FILLING STATION | PARKING | SPORT | DYNAMIC INFORMATION



AGLA specialises in developing solutions to meaningfully integrate technology into the environment.



AGLA was the promoter of the first LED price displays in Italy and Europe. Its experience in the field of FILLING STATIONS dates back to the end of the 1990s. More than 40,000 LED Displays are produced annually for filling stations throughout Europe. A complete range of standard products, in terms of size, color, shape and control method, guarantees AGLA high market penetration. The ability to create tailor-made projects, at low costs, make AGLA a proactive partner in interpreting and satisfying the needs of the sector. To complete the offer, AGLA produces a smart solution for under canopy LED lighting.



"Since 1994 we have been supporting our clients with innovative and reliable filling station communication technology."



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WELCOME



"Outstanding LED performances for any outdoor high demanding environments"





"LED expertise and taylor made solutions to boost our partner business"

111111

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1726

Euro/Kg

Metano



"From the hardware to the software, seamlessly integrated"

The in-house design: mechanical, electronic and software. The control of raw material purchases. The internal production of parts. These features make AGLA a full stack company able to cover all the needs of its partners, guaranteeing the possibility to intervene at any level.



AGLA FILLING STATION ECOSYSTEM $\land \lor \land \lor \land \land$

Different needs with the same answer.

All the system elements are designed individually with the aim of being part of a whole solution, supporting stakeholders at every key moment throughout the product lifecyle, from installation to usage.

MANAGEMENT SYSTEM & **INTERFACES**

SMART LIGHTING

An entire set of management systems suitable for any needs. Not just another LED lamp, but the smart AGLA lighting system to illuminate the filling area.

Elements for displaying fuel prices.

NUMERIC

DISPLAY

Elements for displaying multi-purpose messages.

GRAPHIC

DISPLAY

CPU & CONTROL UNITS

CPU

Hidden cores of the system.





KIT & CUSTOM **ELEMENTS**

Ad hoc arrangement of elements to simplify operations and optimize costs.

SYSTEM DIAGRAM



NUMERIC DISPLAY

INTEGRATED WITH:





LIGHT







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NUMERIC DISPLAY

A fuel price display system is a must in the service station.

AGLA numerical displays achieve this goal in a simple and practical way, with great elegance and visual impact.

A wide range of models for various applications from the monolithic totem to the small under-canopy price signs.

16 | NUMERIC DISPLAY



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DIGIT

The size, shape, type and color of LED are an opportunity for AGLA customers to find a solution to their needs to display fuel prices. Sensors for brightness management and temperature control, diagnostics, protective coatings with polyurethane acrylic resins treated by UV oven guarantee quality and durability.

The method of connection through flat cables for data transport and power supply makes wiring and installation quick and easy.



H.80



H.160



H.300 H.450



















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PRICELINE



INCLUDES CABLES

AGLA's proposal is flexible. Digits can be supplied individually or grouped to form individual pricelines. The layout of the lines can be different depending on the configurations required by the customer and the currency thus according to the regulations of the country of destination.

For ease of use, AGLA offers the possibility of providing pricelines on aluminum supports or inside cabinets with standard or custom designs to meet the needs of the customer's project.

LAYOUT





DISPLAY SUPPORT (preassembled and wired)

IP54 ALUMINUM CASE (preassembled and wired)



NO DISPLAY SUPPORT (disassembled parts)



EXAMPLES - PRICELINE LAYOUT



H240-3i-2DP



H240-3i-3DP

H240-4i-1DS



H240-3i





H240-160-4i-1DP

H240-160-5i-4DP



H240-5i-1DP





H240-160-3i







H240-5i-4DP









H240-160

H120-80

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H200-120



H300-200



H450-300

EXAMPLES - SPECIAL CHARS





H150-100



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GRAPHIC DISPLAY

In a service station, in addition to displaying fuel prices, there may be a need or desire to show the users other information.

The graphic display proposal is multiple in terms of: size, pixel pitch and number of colours, thus to respond to different needs or limitations.

The AGLA range is wide and perfect to find the right solution in consideration of the available mounting spaces, viewing distance, type of contents, economical aspects or any other kind of needs.



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TILE

AGLA graphic displays tiles are offered with two different technology, RGB and FULL COLOR. RGB displays, with static piloting LEDs, allow to represent icon, figures, texts and numbers in 7 colors with different fonts and sizes. FULL COLOR displays, with a multi scan piloting, are perfect to display any kind of multimedial visual content. Both type of tiles are offered with different pixel pitch and size to support any kind of visualization.

AGLA tiles are protected by coatings with polyurethane acrylic resins treated by UV oven to guarantee quality and durability.

RGB GRAPHIC TILE

Static piloting LEDs



FULL COLOR GRAPHIC TILE Multi scan piloting LEDs

PITCH 5 mm



64x32 px PITCH 4 mm







PITCH 6 mm



64x64 px PITCH 3 mm

64x64 px PITCH 2.5 mm

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MATRIX **DISPLAY**



INCLUDES CABLES

AGLA graphic modules can be realized flanking RGB or FULL COLOR tiles. Thank to this, a wide range of graphic display can be offered by AGLA.

The application, the content and the reading distance characterize the choice of one type of tile over another.

The final display is proposed in standard sizes or tailor-made by customizing the grouping of the modules.

The module is supplied on aluminum supports or inside cabinets with standard or custom designs to meet the needs of the customer's project.



LAYOUT OVERALL DIMENSION (Height x Width) RESOLUTION PIXEL PITCH (mm) 10 8 6 12 15.6 LED COLOR FULL COLOR LED RGB

DISPLAY SUPPORT



DISPLAY SUPPORT (preassembled and wired)





NO DISPLAY SUPPORT* (loose display and cables)

28 | GRAPHIC DISPLAY

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WATERPROOF CASE (preassembled and wired)

*available only for some tiles model

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CPU & CONTROL UNITS

AGLA's central processing unit (CPU) is universal for all digit models, regardless of the type of LED, the height of the display, or the number of connected price lines.

In addition, it can interface with all wireless or wired control systems manufactured by AGLA. RGB modules are connected and managed by the same CPU, while an additional FPGA is required to manage FULL COLOR matrices.





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S3 CPU



S3 EXPANSION



S3 CPU is the AGLA universal board used to manage the price displays. Only one version for all kind of configurations. Special 26-pin connectors are mounted on the S3 circuit board to manage up to 6 Pricelines on one side. For double sided price signs an Expansion boards is connected to the CPU to manage the second face.

N.3 dip-switch are used to configure the price sign by activating or not certain functions (addresses, sensors, etc). Protection fuse, Radio module and various connectors (for data transmission and power supply) complete the composition of the CPU usually sold inside an IP plastic box. The board can also be supplied loose at the discretion of the customer's needs.

FEATURES



S3 WITH EXPANSION: 12X UP TO 6 PRICELINE DOUBLE SIDED



3 RADIO/WIFI



UNIVERSAL/RETROCOMPATIBLE

FPGA



PLAYER







The FPGA is used to control all FULL COLOR graphics modules regardless of pixel pitch. The FPGA thanks to the very short computation time, allows to control up to 512x512px according to the type of matrix connected.

Multiple FPGAs can be connected in cascade in order to realize screens of the desired size.



The Player is able to play stored content, or render information in real time. The processed data flow is sent to the FPGAs that take care of displaying the content on the controlled portions of the screen.

Accessible via wireless or cable, it allows local or remote content management and price retrieval if connected to the controller for get data from the POS.



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MANAGEMENT SYSTEM & INTERFACES

AGLA's management system is designed to be simple and scalable based on the customer's needs. From a simple standalone radio controller for local management to a cloud-based solution for content management. In addition, a local keyboard connected to the POS can automatically retrieve prices and share data with other parts of the system, locally or remotely.



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TAKEY 15



TAKEY 20



It is the control device used for the local management of the price signs, via Radio transmission. The 15 keys allow to manually change the prices and select graphics if present, to activate certain functions and to diagnose its functionality (for example, reading the brightness level of the displays, the temperature of the price boards).

FEATURES



BATTERY

It is the device used for the "automatic" management of the prices, from protocol, thus remotely. This keyboard with various protocols loaded on board acts as an interface / converter between POS and price Pole. Through the 20 keys, it is possible to choose between the different interface protocols but also to change the prices manually, by first selecting the appropriate data source option, visible by the large LCD display placed over the keys.

FEATURES POS CONNECTION POS



<u></u> RADIO

TELLME





POS



- It is the system management platform that provides a remote or local interface with each AGLA device.
- It manages fuel station communication in a simple and smart way.
- It ensures information accessibility and is the CMS through which users can schedule and edit messages to be displayed. In addition, it can synchronize the data inserted by the user with the data retrieved from the POS.

FEATURES CLOUD BASED REMOTE ACCESS POS CONNECTION





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SMART LIGHTING

An intelligent lighting system, not just an ON/OFF lamp, that can be integrated into the filling station environment. The AGLA LED lighting system ensures true energy efficiency thanks to high-performance LEDs and all the technical construction features. A lighting system that meets the needs of everyone, from the project designer to the installer, from the owner to the user of the service station.

All this because behind the simplicity of the lines, there is a sophisticated and efficient optical, electronic and mechanical design, the result of AGLA's twenty years of experience in LED applications.



SYRMA.LIGHT

SYRMA.LIGHT is the LED lamp by AGLA, sold for many years on the international market, and recognized for quality and aesthetics. Thin and light, it is ideal for retrofitting old high consumption lamps. SYRMA.LIGHT is smart because it is provided by an "intelligent driver" that gradually increases the power to compensate for the physiological decay of the brightness of the LED. Thanks to this, each lamp guarantees more than 5 years with the same luminous flux. A photoresistor mounted in the center of the lamp automatically adjusts the brightness, according to the external ambient light, increasing its efficiency.







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SYRMA.LIGHT



With symmetrical lenses, SYRMA.LIGHT directs all LED energy in the directions where light is needed, maximizing the light output/consumption ratio.

LENSES

Silicone is rich in remarkable features and one of the main for this applications is the resistance to Hydrocarbon (high presence in filling station), which represents the main cause of yellowing of the plastic materials. Combined with high temperature resistance, these features of the lenses drive to a high transparency of 94%, compared with 92% of the glass and 87-88% of PMMA (Polymethyl-methacrylate). Moreover, since also the primary lens of LEDs is made of silicone, improves the LED-lens pairing and thus efficiency.

Material	Aluminum + Techno-Polymer
Dimension	491 x 491 x 7,5mm
Weight	4,1 Kg
Voltage	180-260Vac - 50-60Hz
MIN Power (starting)	75 W
Average Power	80 W
MAX Power (after 60K hour)	89 W
Protection Grade	IP 54
IK	08
Insulation Class	11
Led Brand	NICHIA JAPAN
Lens	Silicone LSR
Nominal Flux of the lamp	9.622 Lumen
Nominal Flux of the LED	10.710 Lumen
Color Temperature	5000 °K (4000 K)
Number of LED	30 power LED
Cromatic Rendering	> 80
LED Lifespan	> 60.000h
PFC	0,95_0.97
Operating Temperature	-30 C + 50 C
Operating Humidity	0 95 % R
Life of the Devices	> 60.000 h
Programmable Power*	From 0 to 89W
Programmable Brightness*	From 0 to 100%

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*if pre-ordered



PRODUCT KIT

The elements shown in the previous pages of this catalogue represent the single components necessary to make a Product Kit to be integrated into the Customer's Structure. AGLA combines differently all these elements:

- Pricelines
- Matrix
- Supports
- Cables
- CPU
- Controller
- Power supply

according to the kind and configuration of price sign the Customer has to manufacture.





NUMERIC PRICE SIGN KIT

The AGLA price list kit consists of all those elements that are indispensable for the visualization of prices. The first element, the visual one, are the Numerical Displays, in the various versions according to the application structure; power supply and data transmission are entrusted to a single element represented by the 26-pole flat cable. The CPU board, collector and distributor of data, is supplied in a suitable and separate housing. IP 67 Power Supply units and Control System complete the price sign kit.





rgb & numeric SIGN KIT

In the filling stations, the visualization of fuel prices can sometimes be accompanied by the need to display short messages for users.

In these cases, the AGLA RGB & Numeric Sign Kit is composed of all components to reproduce Prices thus the Numeric Displays, the 26-pole flat cables, the CPU unit, the power supply and, customarily on top of the prices, a RGB 7-colors Display.

A Radio keyboard or a Cable keyboard (through protocol) is supplied to selects precharged messages.





GRAPHIC & NUMERIC SIGN KIT

An evolution of the RGB & Numeric Kit is represented by the Graphic & Numeric Kit. In this case, a Full Graphic matrix is used for portion dedicated to the messages, making interaction with the public truly dynamic.The pricing part remains almost unchanged, always made up of the numeric displays, the 26-pole flat cables, the CPU unit, the power supply kit. The management of the entire system can be done remotely, through a dedicated software, or locally thanks to the local controller.





full graphic SIGN KIT

The Full Graphic Sign Kit is the latest generation system for displaying prices and messages dynamically, separately, alternately.

This kit is completely and exclusively composed of a FULL COLOR matrix and all devices and accessories necessary for this type of operation.

Full Graphic Kit management takes place through a dedicated SW that allows to build almost neverending representations, within the screen dimensions and definition.

Read prices from local POS is still possible thanks to the keyboard connected to the system and remote connected.



Power supply

Full color graphic matrix







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