

Countum Group

SATAM

Metering Solutions

EQUAVISION Depot and Terminal Management System

Comprehensive

Effective solution for supervision and management of products movements in your depot and terminal

Implemented with client-server architecture for a fast and effective control of your loading bays, products reception, dispensing facilities and for an optimum management of authorizations

Modular

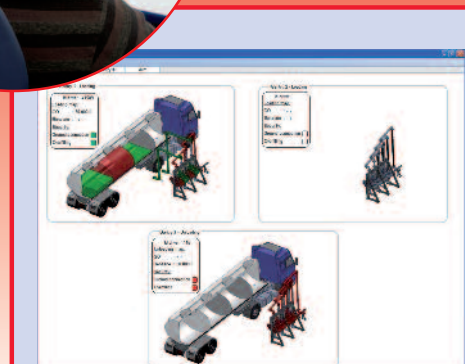
Modular approach allowing the implementation of specific functions only required by the user on the site

Perfectly suited to small size depots requiring only supervisory of loading areas as well as to larger sites requiring comprehensive control and monitoring of the entire facility





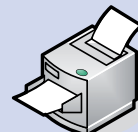
Work stations



Customer application 1



Work station

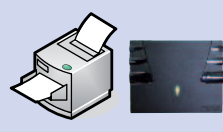


Printer

Customer application 2



Work station



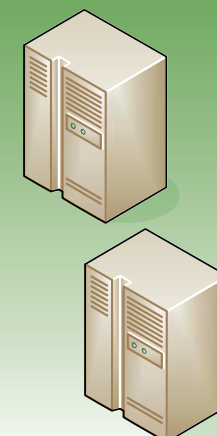
Printer & encoder

Server application



Communication with
Equalis and badge readers
MySQL Data base

Customer host system



Control room Ethernet network

Loading bays



Flow computer



Additives injection



Security devices



Loading arm

Coupling



Blending equalis



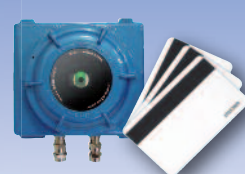
Measuring system

Safety valve

Delivery control and authorizations



Authorisation lights



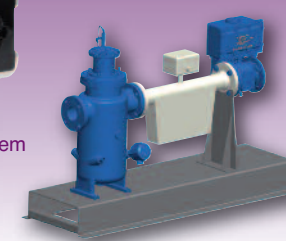
Badge reader

Product reception and dispensing



Control room flow computer

Metering system for pipeline



Field flow computer

Reception metering system



Function	Description	Included Option
Server application	- Batch controllers interface and management	I
	- Pumps and valves status (under preparation)	I
	- Remote maintenance and diagnosis of flow computers and Equavision software	0
Work station Customer applications	- System configuration and setting	I
	- Man Machine Interface - administrator, supervisor and operator levels	I
	- Orders and deliveries management	I
	- Remote control of loading operations (volume preset, loading plan, stop...)	I
	- Display and management of alarms in real time	I
	- Edition and printing of diaries, delivery tickets, report edition	I
Loading bay	- Additive injection management via flow computer	I
	- Blending system management via flow computer	I
	- Metering system management via flow computer	I
	- Safety valves management	0
	- Management of top or bottom delivery	I
Data base	- Possibility of interface with host system (process control, DCS, ERPs, etc.)	0
	- Statistics and reporting	0
	- Computer assisted remote maintenance and diagnosis	0
Delivery control and authorizations	- Management of drivers, trucks, customers and quotas	0
	- Badge reader for delivery authorization	0
	- Vehicle queue management (under preparation)	0
Product reception and dispensing	- Reception and transfer trough pipeline	I
	- Ships, trains and trucks measured offloading, product return	I
	- Tank to tank measured transfer	I

Technical data - Supervision and data management

Model		EQUAVISION
Description		Solution of supervision and control of liquid products movements based on a client-server architecture Management of loading plans and remote control of loading and unloading operations Maintenance and configuration tool
Supported batch controllers		Equalis S, Equalis L. Contact us for other flow computers
Technical specifications	Server computer	Operating system: Windows 2008 - Possibility of redundant hard disc Server Microprocessor : Intel Xeon 3.2GHz or equivalent Communication : Ethernet, Wi-Fi
	Client computer	Standard computer with Ethernet – RJ45 - connection
	Encoder and badge reader	RFID technology, Ethernet communication ATEX Ex d housing (badge reader)
	External Wi-Fi antenna	Configuration via Windows explorer IP68 - ATEX zone 2 1 or 2 LAN network depending on configuration
User interface	Gantry box	Display of position and status of each batch controller on the loading gantry
	Arm box	Status of batch controller, loading arm, delivery point : <ul style="list-style-type: none"> - real volume, base volume, temperature, flow rate, totalizers, real time blending rate and additive injection rate during the delivery - real time display of data entered by the driver on the Equalis - Display of pending delivery progress status (% of preset quantity) Configuration and visualization : <ul style="list-style-type: none"> - Single products (name, associated additives...) - Blended products (name, blending rate, additives, base products...) - Additive injection configuration (name, segment of volume, initial volume, etc...) - Visualization and configuration of binary inputs (characteristics and status in real time) - Visualization in real time of the status of control relays - Visualization and errors acknowledgment: metering pulses, PT100, emergency stop, over and under flow, additive leakage... Actions on batch controller <ul style="list-style-type: none"> - Switch to pre delivery status, stop or stand-by of pending delivery
Loading plan interface	Functions	Creation of a loading plan in order to control the delivery via RFID badge system Creation of a data base dedicated to driver, customer, vehicle Creation of a data base of available products Storage in real time of delivered quantities Visualization of previous loading plans sorted by customer, driver, products... Printing of loading plans (summary of the transactions associated to a loading plan)
Data base	Specifications	MySQL – Stored on server computer Up-date in real time via server application of MySQL data base
	Connection Equalis - Equavision	MODBUS TCP/IP – Wired or wireless connection (Wi-Fi)
Diary		Storage of the transactions data Possibility to sort the data by date, product, driver, event, customer... Excel export sheet fully configurable
Ticket - Bill of lading		Global ticket associated to an order or single ticket associated to one delivery Manual or automatic printing Transaction number, date, time, delivered quantity (ies), average temperature, driver, user... Ticked layout and printed data configurable with Microsoft Word
Diagnostic report		Contains all requested data for a comprehensive diagnosis of connected batch controllers. Diagnosis data are stored by transaction. Crystal report format for easy operation

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