

FUNCTION	COMMENTS
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eSLUMP BASIC

Easy to install	Supplied in a pre-assembled kit with cables & quick link connectors ready for unlimited future expansion! (usually 2 work hours of one technician to install the BASIC version, 3 additional hours required for eSLUMP ADVANCED)
Complete control and configuration by user without recurring operating costs	
Unique automatic identification of the vehicle under the loading point	Allows fully-automated, operator-independent loading procedures - Elettrondata's SELF-SERVICE FUNCTION.
Mixing drum speed and rotation detection	With proper mixing speed indication
Automatic detection events/anomalies/timings	At zero operation costs!

eSLUMP ADVANCED

Events/anomalies alerts to dispatching center	
Automatic detection of the delivery zone	
Automatic completion of the delivery document at the batching plant	
Real-time geographical localization of the vehicle position and status	
Visualization of the turn by turn path chosen by the driver	
Integration with automatic delivery optimization system (Dispatching)	
Full technical support during installation, configuration and operation	
Total data security	Delivery database is installed on a server that stays with the user!
On-board navigator interface, for automatically acquiring the pouring site destination	
Anti-theft function	



eSLUMP BASIC eSLUMP ADVANCED

...THE TOTAL CONTROL
ON CONCRETE
FROM PRODUCTION TO
POURING SITE...

...WITH REAL-TIME FLEET
SUPERVISION AND LOCALIZATION...



It is well known that a good concrete produced from the plant can be spoiled during its delivery. SLUMP guarantees the respect and application of the proper delivery procedures, monitoring and preserving the slump of the concrete mix. Introduced as a worldwide innovation for the first time in 2001, at ERMCO Convention in Berlin, SLUMP is the first data collection smart unit specifically designed for installation on truck mixers and mobile concrete pumps. Consolidated solution over the years with 2000 installed units!

eSLUMP BASIC ♦ CONNECTED TO THE BATCH CONTROL SYSTEM FOR DIRECT SLUMP VALUE INDICATION + ADDITION OF WATER MANAGEMENT

- eSLUMP BASIC closes the loop that starts with the automated concrete production, by monitoring the mix characteristics during load, transport and pouring on the delivery site.
- eSLUMP BASIC allows a gradual reduction in the variability of concrete mix, leading to a reduction of cement over/dosage, and reducing the risk of disputes on the product quality.
- eSLUMP BASIC optimizes loading times at the batch plant, and mix homogenization times at pouring site.
- eSLUMP BASIC takes the responsibility of the mix quality out of the driver's hands.
- eSLUMP BASIC traces and documents the modifications occurred to the concrete mix on the pouring site.
- eSLUMP BASIC recognizes truck's correct positioning and unique ID at the loading point, allowing fully automated, operator-independent loading procedures.
- eSLUMP BASIC is compatible with any automatic batching control system, through the SLUMP-DRIVER software.
- eSLUMP BASIC works and can be configured without a link to the GSM/GPRS network, at no operational costs!

eSLUMP ADVANCED ♦ SATELLITE LOCALIZATION SYSTEM WITH GPS MODULE

- eSLUMP ADVANCED allows geographical localization of the trucks through the GPS satellite network, sending all information through the GPRS network.
- eSLUMP ADVANCED automatically stores the turn by turn path chosen by the driver.
- eSLUMP ADVANCED guarantees low operating costs, thanks to GPRS traffic optimization and free choice of the preferred carrier provider.
- eSLUMP ADVANCED embeds anti theft functions without added costs.

TRUCK COMPONENTS LIST

- 1** "T" hydraulic pressure gauge junction.
- 2** Infrared \ radio truck mounted transceiver.
- 3** On board microprocessor (unique truck id, integrated hydraulic pressure senso).
- 4** Mixing drum rotation direction and speed sensor for BAR to SLUMP mm conversion and automatic detection of transportation phases and timing (not necessary for CIFA trucks with on board electronics: data collected via CANBUS).
- 5** Pulse launcher for water/admixture addition monitoring.
- 5.1** Electric valve for Water control. (OPTIONAL)
- 6** Waterproof display interface and keyboard for indication of: slump, mixing cycle, phase, water addition, timing, diagnostics, configuration parameters, etc.
- 7** Infrared/radio transceiver for data link with the plant control system Unique automatic identification of the vehicle under the loading point.
- 8** PLC and PC control system for detection of truck under the loading point, real time SLUMP display during the load, memorization of the delivery data on the corresponding batch report when the truck returns to the plant.
SLUMP DRIVER – interface software for connecting the SLUMP system to any batch control unit.



ADD SLUMP ADVANCED OPTION TO ANY OF THE SLUMP CONFIGURATIONS, FOR REAL-TIME POSITIONING OF THE TRUCKS ON A MAP

PLANT CONTROL COMPONENTS



Geographical localization unit (SLUMP ADVANCED) – GPS receiver – GSM data module for real time monitoring of the truck during the delivery. Fleet management and antitheft function.



Optional mapping client software available for geographical localization of the trucks. Low cost geographical localization capability, thanks to SLUMP's unique GPRS traffic optimization feature. SLUMP ADVANCED - MAPPING SERVER for real-time update of the information from the trucks, storage on local Database of the geographical position, status, delivery phase and timings, preparation of files with journey path, interface to the BATCH CONTROL and DISPATCHING software. Server functions via Internet connection, for displaying the truck position and status on a detailed geographical map. GEOGRAPHICAL LOCALIZATION - access through User ID and Password, on a per truck monthly fee basis, to a mapping WEB CLIENT (even on palmtop device), in order to display the real-time position and status (icon's different colors) of every vehicle in the fleet.



Direct interface to on board navigation system, to automatically acquire the delivery destination and message communication.

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