



EPOS 10



*universal control
unit*



- *savings*
- *ecology*
- *control*
- *communication*



universal control unit

- Written and spoken information in customer's native language;
- Ergonomic, compact, sturdy case with SMD electronics;
- Control panel designed in accordance with EMC 2004/108/CEE ;
- CAN-BUS open communication system according to CEN TC 337/WG3 EN15430-1;

- 4" LCD graphic screen with textual, sound and spoken warning messages from parameter change and from sensors on spreader;
- Contactless user (driver) identification - registration ability for more user for single spreader;
- Screen backlight sensor - adjusts screen brightness according to cab illumination ;
- Programmable for work with more than 10 types of spreading material;
- Spreading width changeable from 1.5 to 9 meters in 0.5 meter steps, for left and right asymmetry;
- Changeable pre-wetting material quantity - 10% do 40% easy adjustable during driving, without entering the panel setup;
- Connectable signal from snow plough;
- Auto calibration capability;
- Adjustment of spreading quantity (dry and wet material) and width by highly precise closed regulation circuits;
- Large memory stores plowing and spreading data for minimum last 200 hours without erasing;
- Memory card for download, storage and data transfer, but also for control unit programming is standard, USB memory stick;
- Serial, RS232 interface, available for spreading data transfer from control unit to the base - additional GSM/GPRS mobile unit needed ;
- Software compatible and programmable for work with thermo camera;
- Automatically generates various reports;
- WLR – Whole Life Report;
- Etc....



VERSATILITY

THERMAL CAMERA COMPATIBILITY

Spoken info in customer's native language

Single chamber function (auger conveyer spreader, belt conveyer spreader or chain conveyer spreader)

Dual chamber function;

Changeable spreading pattern - symmetrical spreading pattern;

Left spreading track asymmetry;

Right spreading track asymmetry;

Working with the thermal camera;

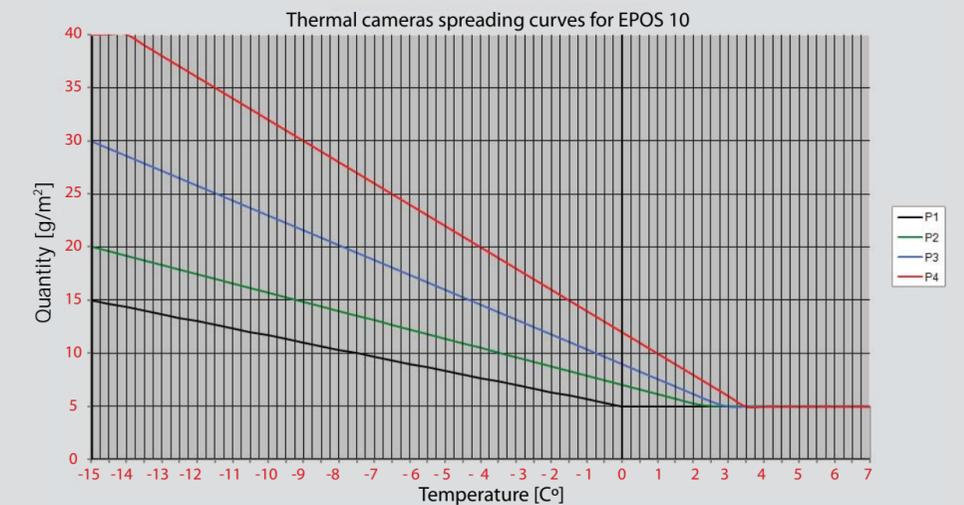
USB PORT

RS 232 PORT

Location of roads in the area, and facilities that are on the road (bridges etc.) cause the temperature difference of the pavement . These differences can be very significant. Without the help of thermal camera operator can not observe these differences and respond to them. In such cases the whole section is covered with more salt than is necessary. This is one of the reasons why thousands of tons of salt are thrown unnecessarily into the environment . The function of thermal camera is to show actual quantity of spreading material needed and not the quantity that were estimated.

air temperature
pavement temperature
spreading program selected

What is thermalspreading?
Thermalspreading is automatic mode of spreading in which the amount of spreadnig is automatically determined by the measured pavement temperature and the selected program.



The most important advantages of thermalspreading are:

- up to 30% material savings in spreading
- significantly reduces environmental pollution
- optimal spreading in accordance with actual needs greatly increases the safety of traffic on the roads

REPORTING

online GPS-GPRS system RASCO-MOBILISIS web application

Reports examples (on users native language):

- Report from EPOS 10 control unit shown on PC display using Rasco EPOS Utilities software;

Report by section

#	wet material	total amount (l)	total duration	total distance (km)
1	CaCl ₂	45	6min	4.4

Amount of pre-wetting material used

#	dry material	total amount (kg)	total duration	total distance (km)
1	COARSE SALT	943	27min	19.1

Amount of dry spreading material used

#	road	amount (kg): dry material	amount (l): wet material	traveled distance (km): driving	traveled distance (km): spreading	traveled distance (km): plowing	duration: driving	duration: spreading	duration: plowing
1	0020	406	34	12.0	7.0	2.0	36min	14min	7min

• large number of different reports directly on the LCD screen of the EPOS 10;
 • reports on the amount of all types of materials spreaded per section, day, month, year or throughout the lifetime of the device
 • reports on the operating time spent on driving, spreading and plowing per section, day, month, year or throughout the lifetime of the device
 • if the device is handled by two or more operators (drivers) it is possible to get all of the above information separately for each operator(driver)
 • reports can be read directly on the LCD screen of the control unit or transferred to a memory card (USB memory stick) and archived as solid and unchangeable record on the PC in the user database

Report by driver

#	user	amount (kg): dry material	amount (l): wet material	traveled distance (km): driving	traveled distance (km): spreading	traveled distance (km): plowing	duration: driving	duration: spreading	duration: plowing
1	(rasco)	2	0	2.0	2.0	0.0	17min	1min	-

A report on the operating time with EPOS 10

value	duration	traveled distance (km)	spent material (kg,l)
Drive	1h 38min	32.0	-
Spreading	27min	19.0	-
Spreading - chamber 1	27min	19.0	943
Spreading - chamber 2	-	0.0	0
Spreading - wet	6min	4.0	44
Plow work	10min	5.0	-
Main plow work	10min	5.0	-
Side plow work	-	0.0	-



EPOS 10 is equipped with RS 232 serial interface used for GPS - GPRS module connection with purpose of monitoring and data transfer from control unit to the base.

Software solution is RASCO - MOBILISIS web application that in user's native language allows:

- online monitoring of fleet vehicles in winter service
- online insight into the current position of each vehicle in fleet
- online insight into the activities of each vehicle in the winter service fleet (current activities and used parameters)
- archiving of all data on the activities of each vehicle in fleet (route - section - map, information on activities at every point of section)
- all data is archived and unchangeable and can be used as evidence in the case of a dispute caused by activities on the road
- large number of reports that are archived can be linked to a section, vehicle, driver, spreading material, time spent driving, time spent working with the spreader, time spent working with the snowplough, etc.

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