



ADP1/L

Electronic Calculator for Fuel Dispensers



The calculator ADP1/L covers all the functions necessary for the low-cost dispenser and in addition it supports the current global standards. It implicitly supports an electronic calibration of meters, an automatic temperature conversion, an internal electronic totals, a communication line and much more. It is not necessary to install any additional electronic module to the standard single product dispenser.

ADP1/L can operate in either the standalone (manual) or the communication mode. The calculator uses communication protocol EASYCALL that is also implemented in the widely used site controllers and POSes – for instance DOMS, PetroVend and others.

Setting the calculator parameters guarantees the flexibility of the function. The parameters are compatible with the other Beta Control calculators. The calculator parameters, unit prices, electronic calibration values and the ATC can be set using the wireless keyboards over the infrared transmission.

The customer prepay keyboard can be connected to the ADP1/L calculator. Customers can prepay the volume or the amount of fuel they ask to dispense. The external slave display can be connected to the calculator that has the same dimensions as the display.

The calculator is equipped with the internal electronic nozzle totals of the volume, amount and number of transactions as well as with the non-reset-able meter totals of the volume. Optionally, the calculator can be extended with the seven-digits electromechanical litre volume totals.

The calculator can be configured for using the two or three-channel shaft-encoder (pulser). Using the external PWM/L module enables driving the high and low flow valves.

On the basis of the customers request for the low-cost solution, the ADP1/L calculators are delivered without the case and power supply.

The input and output wires are screwed to the pins of the included connectors. The used connectors enable the replacement of the calculator unit if necessary - for the service and maintenance purposes. The connectors can efficiently be re-plugged to the other unit.

The ADP1/L calculators are approved according to OIML R117-1 and Welmec Guide 10.4.

Features:

- new compact electronic calculator with the integrated display (2 versions available – grey positive or blue negative LCD with the LED back-light)
- low-cost
- compatible with the other ADP/T calculators
- electronic meter calibration
- integrated automatic temperature compensation (ATC)
- wide range of ambient operating temperatures
- proportional valve delivery control
- motor thermal fuses control



Technical data:

Power supply	+24 V \pm 5 %, 30W
Operating temperature	-25° C to +70° C
Display	LCD, digit height 25,4mm, LED backlight
Communication line	galvanic coupling RS 485
Communication protocols	EasyCall, DART, Pumalan, Nara, IFSF (requires external IFSF module)
Maximum flow	500 l/min
Shaft encoder type	two or three channel, OPEN COLLECTOR outputs, power supply +8,8 V
Analogue input for the PT100	Sensor PT100 class A acc. to IEC751 temperature range from -25° C to +55° C
Dimensions	202x137x50 mm
Coverage	IP00 ((producer of dispenser must prepare the case with the sealing points)

Expand Modules:

TOT1/T – electromechanical litre volume total.

DISPLCD/N – external side display.

PKONV EC-IFSF - IFSF communication interface designed for ADP1/L calculators. It is also compatible with the ADP/T, ADP/M and ADP/E calculators.
Communication lines:
EASYCALL - RS485, 9600Bd
IFSF - FTT-10 (Free Topology Twisted Pair).

PLOG module - Converts the RS485 line to the current loop according to the PUMALAN specification. Mounted onto DIN rail 35mm.

KL-SERINF – enables parameters setting, electronic calibration setting, setting of the ATC, setting of the unit prices and displaying of the electronic totals.

KL-MANINF – enables setting of unit prices, displaying of the electronic totals.

PWM/L module – converts the PWM output for the proportional valve to the output for the two level ON/OFF valves.