

# LABORATORY ELECTRONICS LAB-EL Co.



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## OFFER FOR THE MEASUREMENT DEVICES AND SERVICES OF THE LAB-EL LABORATORY

Offer date: 2022-03-02

Remarks to offer please see on page 12..13.

### 1. Hytherographs, hygrometers, psychrometers

Price in EUR  
(without VAT tax)

1.1. HYTHEROGRAPH LB-701 WITH A READING PANEL LB-705 - stationary device for measurement of air humidity and temperature in the rooms; PC interface; memory of 640 measurements		
basic version:	scope of temperature measurement LB-701: (-40°C...85°C)*	
	scope of humidity measurement: 10%... 95%	505,74
additional payment for a version LB-701H:	scope of humidity measurement : 0...100%	47,72
1.2. An extension cord of a connection cable for a hytherograph LB-701	length 4 m	8,54
	length 9 m	11,46
	length 14 m	14,59
1.3. HYTHEROGRAPH LB-701 WITH A READING PANEL LB-706 (LB-706G) - portable device for measurement of air humidity and temperature in the rooms; PC interface, a clock, memory of approx. 2600 measurements,		
positive opinion from the Central Military Meteorology Center;		
basic version:	scope of temperature measurement LB-701: (-40°C...85°C)*	
	scope of humidity measurement: 10%... 95%	391,76
additional payment for a version LB-701H:	scope of humidity measurement : 0...100%	47,72
additional payment for a version LB-706P:	extended measurement memory (up to approx. 10500 measurements)	32,92
1.4. Protective cover (shoulder bag)		#ADR!
1.5.1. Printer KAFKA -1R		#ADR!
1.5.2. Printer KAFKA -1 Portable (portable, in a protective cover, with a built-in accumulator)		#ADR!
1.6. HYTHEROGRAPH LB-701 WITH A CONTROL-READING PANEL LB-725A (climate regulator)		
converter of the room air conditioners, climate chambers; PC interface;		
memory of approx. 4000 measurements; certificate of type form the Central Office of Measures.		
basic version:	scope of temperature measurement LB-701: (-40°C...85°C)*	
	scope of humidity measurement: 10%... 95%	567,42
1.7. HYTHEROGRAPH LB-710 - sensor in an industrial casing, for measurement of air humidity and temperature;		
positive opinion from the Central Military Meteorology Center;		
basic version LB-710:	scope of temperature measurement: (-40°C...+85°C)*	
	scope of humidity measurement: 10%... 95%	259,23
version LB-710H:	scope of humidity measurement: 0...100%	306,95
1.8. THERMOHIGROMETER LB-710A - sensor in an industrial casing, for humidity measurement and air temperature, with display, temperature measurement resolution 0.01°C; 2a *)		
basic version LB-710A:	scope of temperature measurement: (-40°C...+85°C)*	

	scope of humidity measurement: 10%... 95%	270,90
version LB-710AH:	scope of humidity measurement: 0...100%	318,61
1.9. THERMOHIGROMETER LB-710AL - a sensor in a room housing, for measuring humidity and air temperature, with display, temperature measurement resolution 0.01 ° C; 2a *)		
basic version LB-710AL:	scope of temperature measurement: (-40°C...+85°C)*	
	scope of humidity measurement: 10%... 95%	270,90
version LB-710ALH:	scope of humidity measurement: 0...100%	318,61
1.10. HYTHEROGRAPH LB-710B - sensor in an industrial casing, for measurement of air humidity and temperature, scope of measurement: temperature 0°C...+70°C, humidity 0...100%, economic version - worse meteorological parameters compared to LB-710		
		#ADR!
1.13. HYTHEROGRAPH LB-710R- sensor in a casing for a meteorological cage LB-719, for measurement of air humidity and temperature, electronics in a silicone filling		
scope of temperature measurement : (-40°C...85°C )*	scope of humidity measurement: 0...100%	355,29
1.14. HYTHEROGRAPH LB-712TW - industrial sensor for measurement of air relative humidity and temperature		
It can have one out of three standards of the analogue outputs:		
current loop 4mA - 20mA; voltage output 0...1V; voltage output 0...10V		
basic version:	scope of humidity measurement: 10%...95%;	
	scope of temperature measurement: (-40°C...+85°C)*	259,23
thermometer LB-712T (only temperature measurement):		77,73
hygrometer LB-712W (only humidity measurement):		197,13
1.15. PSYCHROMETER LB-754P WITH A READING PANEL LB-706T - portable device for measurement of air humidity and temperature using a psychrometric method, PC interface, memory of 2600 measurements;		
	scope of temperature measurement: 5°C...70°C	404,05
	scope of humidity measurement: 5%...99,9%	
additional payment for a version LB-706TP: extended measurement memory (over 10450 measurements)		32,92

## 2. Thermometers

2.2. THERMOMETER - CONVERTER LB-489 (4 x thermometer/S300/0-3V, Ethernet output), *a, *19)		230,89
sensor of 1 temperature TL-4(1 m cable)		18,34
each additional meter of cable		0,63
additional LB-489 option - power over Ethernet - POE		25,01
additional cable for connecting LAB-EL sensor to S300 input, each 1 m		1,04
2.3. THERMOMETER - READING PANEL, PORTABLE LB-706T (LB-706GT)		
reading panel without a sensor, scope -200°C...+550°C, memory of minimum 2600 measurements, PC interface;		208,80
2.4. MEASUREMENT SENSORS FOR COOPERATION WITH A THERMOMETER LB-706T, LB-706GT (without LB-754P):		
LB-754J - one thermometric sensor Pt1000, standard realisation TL-2 (-40°C...+80°C)*, *6)		30,42
LB-754J - one thermometric sensor Pt1000, special realisation	a price depends on a sensor type	
LB-754T - two thermometric sensors Pt1000, standard realisation TL-2 (-40°C...+80°C)*, *6)		48,97
LB-754T - two thermometric sensors Pt1000, special realisation	a price depends on a sensor type	
LB-754P - psychrometer (a sensor for measurement of temperature and humidity using a psychrometric method)		195,04
LB-701 - additional probe for measurement of air temperature and humidity – hytherograph		195,67
2.5. THERMOMETER LB-710TF - inside sensor, scope (-40°C...+85°C)*:		
LB-710TX with an outside standard sensor TL-2 (-40°C do + 80°C)*, *6)		72,72
LB-710TX with an outside special sensor in the scope -100°C...+ 200°C,	a price depends on a sensor type	
2.6. EIGHT CHANNEL THERMOMETER LB-711 - for measurement of temperatures in the scope from -100°C to +200°C		
or from -200°C to +550°C ( version LB-711E):		208,80
additional payment for each standard sensor TL-2 (-40°C...+80°C)*, *6)		18,55
additional payment for each special sensor	a price depends on a sensor type	

2.7. THERMOMETER LB-712T - industrial sensor for temperature measurement in the scope (-40°C...+85°C)*, it can have one out of three standards of the analogue outputs: current loop 4mA - 20mA; voltage output 0...1V; voltage output 0...10V	77,73
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### 3. Barometers, thermohygrobarometers, pressure gauges, multisensors

3.1.1. MULTISENSOR LB-531, miniature, battery-operated, display, min / max memory, versions:	
LB-531P - barometer - pressure measurement range: 700 hPa...1100 hPa	118,36
LB-531TP - thermometer, barometer - measuring range like LB-531 + LB-531P	122,94
LB-531TWP - thermometer, hygrometer, barometer - measuring range like jak LB-531 + LB-531P	236,72
LB-531TWL -thermometer, hygrometer, light meter - measuring range like LB-531 + 180 kLux	236,72
LB-531TWPL - thermometer, hygrometer, barometer, light meter - range like LB-531TWL + 180 kLux	259,43
3.1.2. MULTISENSOR LB-532, miniature, battery operated, recorder, display, memory, USB interface, versions:	
LB-532P - barometer - pressure measurement range: 700 hPa...1100 hPa	147,95
LB-532TP - thermometer, barometer - measuring range like LB-532 + LB-532P	152,53
LB-532TWP - thermometer, hygrometer, barometer - measuring range like LB-532 + LB-532P	266,31
LB-532TWL - thermometer, hygrometer, light meter - measuring range like LB-532 + 180 kLux	266,31
LB-532TWPL -thermometer, hygrometer, barometer, light meter - range like LB-532TWL + 180 kLux	289,02
3.2. TERMO-HIGRO-BAROMETER LB-575THP (built-in sensors, graphic display, -40 ... + 85°C, 10 ... 95% RH, 500 ... 1100 hPa, memory of 960000 records, min / max / average of measurements, optical and audible alarms, USB interface (via LB-376A)	322,37
3.3. HYTHEROGRAPH LB-701 WITH A PANEL BAROMETER LB-706B (LB-706GB) - portable thermohygrobarometer LCD display; PC interface; memory of approx. 1550 measurements; basic version: scope of pressure measurement: 700hPa...1100hPa scope of humidity measurement LB-701: 10%... 95% scope of temperature measurement LB-701: (-40°C...+85°C)*	560,96
additional payment for a version LB-701H: scope of humidity measurement : 0...100%	47,72
additional payment for a version LB-706BP: extended measurement memory (approx. 6250 measurements)	32,92
3.4. Panel-barometer LB-706B (LB-706GB), basic version, without a thermohygrobarometer LB-701 PC interface; memory of approx. 3900 measurements;	365,29
additional payment for a version LB-706BP: extended measurement memory (approx. 15700 measurements)	32,92
3.5. Protective cover (shoulder bag)	17,50
3.6. BAROMETER LB-750, PC interface, internal measurement memory, a clock;	
version LB-750B: full scope of measurement: 700hPa...1100hPa	728,08
version LB-750W: scope of measurement: 10hPa...1100hPa	728,08
Model LB-750W must be calibrated in the external calibration laboratory (see point 13.2)	

### 4. Recorders - loggers: portable (battery) and mobile (car)

Recorders cooperate with PC with use of the program LOGGER - see p. 11.9.

4.1. THERMOMETER RECORDER LB-516T (-30...+85°C, +/- 1°C), *b),	66,89
4.2.1. THERMOMETER RECORDER LB-516AT (-30...+85°C, +/- 1°C), *b),	75,64
4.2.2. HYTHEROGRAPH RECORDER LB-516A (-30...+85°C, +/- 1°C), *b),	139,82
4.3. THERMOHIGROMETER RECORDER LB-518 BLE-LOGGER (-25...+65°C, 0...100% RH, memory 15,000 records, wireless, data reading with an ANDROID smartphone with the STORE-LOGGER application), * 2d)	64,18
4.4.1. HYTHEROGRAPH LB-523 (Wi-Fi, USB, memory, display, -20 ... + 60°C, 10 ... 95% RH), * 2a)	323,62
4.4.2. HYTHEROGRAPH LB-523 SMA (like LB-523 + external SMA antenna), * 2a)	323,62
4.5.1. THERMOMETER LB-523T (Wi-Fi, USB, memory, display, -20 ... + 60°C, internal sensor), * 2a),	236,30
4.5.2. THERMOMETER LB-523T SMA (like LB-523T + external SMA antenna), * 2a)	236,30
4.5.3. THERMOMETER LB-523TX (Wi-Fi, USB, memory, display, external sensor), * 2a), with standard sensor (-40 ° C to + 80 ° C) *, * 6)	210,26

with special sensor (-100 ... + 200 ° C)	depends on a sensor type	
with special sensor (-200 ... + 550 ° C)	depends on a sensor type	
4.5.4. LB-523TD THERMOMETER (Wi-Fi, USB, memory, display, -20 ... + 60 ° C, door sensor function), * 2a),		274,65
4.5.5. HOLDER LB-528A for mounting LB-523 on the wall (in the room, in the car)		8,34
4.6.1. HYTHEROGRAPH LB-524 (GSM/GPRS, USB, memory, display, -20...+60°C, 10...95% RH internal sensors, battery and external supply, external antenna with SMA connector), *2a)		323,62
4.6.2. THERMOMETR LB-524T (GSM/GPRS, USB, memory, display, -20...+60°C, internal sensor, battery and external supply, external simple antenna with SMA connector), *2a)		276,73
4.6.3. HYTHEROGRAPH with BAROMETER LB-524B (GSM/GPRS, USB, memory, display, -20...+60°C, 10...95% RH, 500...1100 hPa, internal sensors, battery and external supply, external simple antenna with SMA connector), *2a)		348,62
4.6.4. HYTHEROGRAPH with LIGHT meter LB-524S (GSM/GPRS, USB, memory, display, -20...+60°C, 10...95% RH, 0...180 klx, internal sensors, battery and external supply, external simple antenna with SMA connector), *2a)		348,62
4.6.5. HYTHEROGRAPH with LIGHT meter and BAROMETER LB-524BS (GSM/GPRS, USB, memory, display, -20...+60°C, 10...95% RH, 500...1100 hPa, 0...180 klx, internal sensors, battery and external supply, external simple antenna with SMA connector), *2a)		370,08
4.6.6. THERMOMETER LB-524T4 (1..4 external sensors, GSM/GPRS, USB, memory, display, battery and external supply, external simple antenna with SMA connector), *2a), price without sensors		291,32
with 1 pcs of TL-2/1m standard sensor ( -40°C do +80°C)*, *6)		309,65
with 4 pcs of TL-2/1m standard sensors ( -40°C do +80°C)*, *6)		364,88
additionally for special sensors (-100...+200°C)	depends on a sensor type	
additionally for special sensors (-200...+550°C)	depends on a sensor type	
4.6.7. POWER SUPPLY 230V/9V DC (for LB-524)		11,67
4.6.8. Accumulator battery Ni-MH Eneloop HR-3UTGB Sanyo or BK-3MCC Panasonic (set for LB-524 - 4 psc)		11,67
4.6.9. Battery charger for Eneloop NC-MQN09W		26,26
4.6.10. Plastic handle LB-528B for hanging logger LB-524 series on the wall		8,75
4.7.1. HYTHEROGRAPH-RECORDER LB-535 (wireless, memory, display, -30...+80°C, 10...95% RH), *2a)		309,24
4.7.2. THERMOMETER LB-535T (wireless, memory, display, -30...+80°C, internal sensor), *2a),		323,62
4.7.3. THERMOMETER LB-535TX (wireless, memory, display, external sensor), *2a), with a standard sensor ( -60°C do +80°C)*, *6)		181,08
additional payment for a special sensor (-100...+200°C)	depends on a sensor type	
additional payment for a special sensor (-200...+550°C)	depends on a sensor type	
<b>INTERFACES AND SOFTWARE FOR PC FOR THE LAB-EL RECORDERS, ASSEMBLY HANDLE:</b>		
4.8.1. Interface LB-513 for programming and readout from the recorders LB-515, USB interface (set of: program LOGGER /U for 1 PC, USB cable)		117,11
4.8.2. Interface LB-513P for programming and readout from the recorders LB-515 and LB515P, USB interface (set of: program LOGGER /U for 1 PC, USB cable)		122,94
4.8.4. Stand LB-528 – multi-function stand for a recorder series LB-520		11,67
4.8.5. Handle with a lock LB-529 – for installation of a recorder series LB-520 on a wall		20,63
4.8.6. Interfaces LB-526 for wireless connection with LB-525 series, interface USB (set of: program LBX for PC, USB cable, for 1 logger LB-525)		150,66
(license extension for LBX program)	as in LBX price list	

## **5. The meters of other climate parameters and carbon dioxide concentration**

5.1. WIND SPEED AND DIRECTION METER LB-746; a device can cooperate with one of the displaying panels or the recorders Anemometer LB-746 is built based on the mechanical elements of USA production		1312,38
Anemometer mechanics LB-746 (no internal electronic system)		1166,73
5.2.1. WIND SPEED AND DIRECTION METER LB-747; a device can cooperate with one of the displaying panels or the recorders Anemometer LB-747 is built based on the mechanical elements of British production (with a holder for a mast)		989,19
Anemometer LB-747P – measurement of only wind speed (no direction, with a holder for a mast)		629,52
Anemometer mechanics LB-747 (no internal electronic system, with a holder for a mast)		864,16
5.2.2. WIND METER CONVERTER LB-380 (for LB-747 mechanic, outputs: 0..10V, 4..20mA)		142,12

5.3. ATMOSPHERIC RAINFALL METER; a device can cooperate with one of the displaying panels or the recorders	
rain gauge ARG314	689,32
rain gauge RG50 with a heater	price to be settled
5.4. SUN RADIATION METER LB-900/LB-901 – in a version with a sensor:	
without a sensor, ready for connecting external sensor	143,37
with a silicon photodiode	232,97
with a sensor Kipp & Zonen SP LITE	733,92
with a sensor Kipp & Zonen NR LITE	2059,64
with a sensor Kipp & Zonen CMP3	1271,54
with a sensor Kipp & Zonen PQS1	1025,03
with a sensor Kipp & Zonen CMP21	4589,39
with other Kipp & Zonen sensors - please ask	
5.6. ULTRASOUND SNOW / WATER METER SR50A	1255,91
5.7. SURFACE MOISTURE METER LB-910	139,82
5.8.1. ANEMOMETER Kestrel 2000 – portable, turbine meter of air flow and temperature	131,49
5.8.2. ANEMOMETER Kestrel 3000 - as Kestrel 2000 plus measurement of air humidity	209,42
5.8.3. ANEMOMETER Kestrel 5000 - as Kestrel 3000 plus pressure measurement & registry in a memory	438,43
5.8.3. ANEMOMETER Kestrel 5500 - as Kestrel 5000 plus wind direction and more...	552,21
5.8.4. ANEMOMETER INTERFACE Kestrel 4000 for PC + a PC program for memory readout	97,52
5.8.5. Kestrel Portable Rotating Vane Mount + Mini Collapsible Tripod	103,98
5.8.6. Spare (exchangeable) turbine for Kestrel anemometer	26,05
5.9. ANEMOMETER AV-9201 – portable, turbine meter of air flow and temperature	70,02
<b>CO2 CARBON DIOXIDE CONCENTRATION METERS (SENSORS)</b>	
5.10. CO2 METER LB-852 (without display), measurement range: 0..10000 ppm	307,78
outputs: 0..10V, S300, *2a)	
option: power supply LB-830 for TS35 mount,	11,46
option: air filter - for LB-760/LB-762 systems)	16,67
5.11. CO2 METER LB-853 (without display), measurement range: 0..10000 ppm	200,46
OUTPUTS: 0..10V, 2 relays	
5.12. CO2 and temperature METER / regulator LB-854 (measurement range: 0..10000 ppm, 0..50°C)	405,93
display, 2 transmitter outputs, outputs: 0..10V,, 4-20 mA, RS-232, S300	
TL-4/N - external sensor of temperature (1 m cable)	19,17
5.13. MODULE collection of environmental data / CO2 meter LB-856 (without display)	346,12
measurement range: 0..10000 ppm, output: Ethernet; inputs: S300, 0..10V, external temperature sensor, *2a)	
<b>6. Universal reading, registry and regulation panels, measurement systems, LAB-EL meteorological stations</b>	
6.1. CURRENT CONVERTER LB-371- for connecting the meters with an interface S300to an input RS232C	18,96
with a galvanic separation, outside calculator feeder, joints DB25/DB25	
Additional adapter for RS-232 - DB25/DB9 LB-373	5,83
6.2. CURRENT CONVERTER LB-375- for connecting the meters with an interface S300to an input USB	29,17
with a galvanic separation, powered from USB, *a), *c), *19)	
USB/USB cable - LB-375 accesory	2,08

6.3. CONVERTER LB-470 - interface S300 for two outputs 4..20mA, galvanic separation	154,41
6.4. TEMPERATURE REGULATOR LB-474 – input for 2 sensors Pt100/Pt1000, 5 transmitter key outputs	179,21
6.5. BLOCK FOR 5 TRANSMITTERS LB-475 for a regulator LB-474	43,76
6.6. CONCENTRATOR RECORDER LB-476 - 8 inputs, memory, RS-232/485 & alarm outputs	291,32
additional payment for optionally built-in interface Ethernet 10/100 (version LB-476E)	72,93
6.7. DATA ACQUISITION MODULE LB-480 Ethernet, memory, display, SD), *a), *19)	
8 inputs: S300/0-20mA/0-10V/Termistor/Pt1000, 3 optional interface modules	611,60
6.8. DATA ACQUISITION MODULE LB-490 Ethernet, memory, big graphic display, SD), *a), *19)	
16 inputs: S300/0-20mA/0-10V/Termistor/Pt1000, 6 optional interface modules, sleep function	1179,65
6.9. Additional options for LB-480 and LB-490:	
additional internal POE supply module	28,55
LB-499-RS232 module with RS-232 interface, galvanic isolation	55,22
LB-499-RS485 module with RS-485 interface, galvanic isolation	55,22
LB-499-REL2 module with two relays SPDP 2A/250VAC	26,67
LB-499-EL-WAVE module for wireless communication with LB-525A	46,68
LB-499-GSM module for GSM communication (GPRS and SMS service)	71,47
LB-499-GPS module with GPS receiver (localization and time service)	95,23
LB-499-AIN module with additional 3 inputs S300/0-20mA/0-10V	73,56
6.10. CONVERTER LB-489 (4 x thermometer/S300/0-3V, Ethernet output, see point 2.2.), *a)	230,89
6.11. TEMPERATURE REGULATOR LB-708TR – temperature measurement and regulation during a heating process (PID),	
big, easy to read display, interface RS-232, maximum scope: - 200°C..+550°C,	#ADR!
additional payment for a sensor in a standard realisation TL-2 (-40°C...+80°C)*	#ADR!
additional payment for a sensor in a special realisation	depends on a sensor type
6.12. DYNAMIC AIR DRYER CONTROLLER LB-720A, the set, military version:	
hytherograph LB-710M2 (metal housing, military version)	302,57
panel - regulator LB-722 v4 (military version)	470,32
programmer LB-721 (military version)	70,43
6.13. CLIMATE REGULATOR FOR MUSHROOM GROWING LB-760A & LB-762 – measurement, regulation	
and registry of base temperature, air temperature and humidity	
and CO2 concentration	see price calculation according to a separate statement of expenses
6.14. BLOCK WITH 8 RELAYS (multi purpose, RS-232 input, case for TS35 rail)	143,16

## **7. Simple climate indicators**

### **7.1. Simple thermometers**

7.1.1. THERMOMETER WT-1	12,92
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### **7.2. Simple hytherographs**

7.2.1. HYTHEROGRAPH LB-103 (min/max memory, big display)	31,88
7.2.2. HYTHEROGRAPH LB-104 (min/max memory, portable)	15,63

### **7.3. Simple meteorological stations**

7.3.1. Meteorological station WS-3650	140,66
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## **8. Moisture meters for building industry and soil**

(with no calibration certificate)

8.1. MATERIALS' MOISTURE METER LB-796A - multifunction device	
basic set for moisture measurement of wood, concrete, brick etc., capacitance method	436,98
additional resistance probe LB-796RC for wall materials + metal dowel	17,92

additional universal resistance probe LB-796RUT with temperature sensor	60,22
spare parts - plate electrode type C: for thin materials, for probe LB-796RUT	6,04
spare parts - sand sensor needles type D: 10cm, for probe LB-796RUT	6,67
additional needle hammer probe for wood LB-796RMT, internal temperature sensor	69,81
spare parts - wooden sensor needles type E: 10 mm, dia. 3 mm, for probe LB-796RMT and LB-796RUT	5,42
spare parts - wood sensor needles type F: 15 mm, dia. 3 mm, for probe LB-796RMT and LB-796RUT	6,04
additional probe for temperature measurement of any medium - thermometer TL-2/796/DB9	27,71
additional probe for air temperature and humidity measurement - HYTHEROGRAPH LB-710CB	179,21
program LB79x for modification of calibration data for various materials, PC cable	20,42
8.2.1. Additional probe for bulk materials (with the container) LB-798	349,46
8.2.2. Additional probe for bulk materials and soil (with the needles) LB-797	553,46
8.2.3. Panel LB-796P (without internal probe) for reading data from sensors LB-797, LB-798	291,32
8.2.4. Program LB79x for modification of calibration data for various materials, PC cable, power supply	20,42

## 9. Computer devices, interfaces

9.1. SIO – PC TERMINAL EMULATOR	#ADR!
9.2. Converter DE-311 (1 port RS-232/422/485 for LAN network 10/100 Mbps)	115,44
9.3. Converter Transio A53 Moxa (RS-232/RS422/485, galvanic isolation, a feeder)	63,97
9.4. CONVERTER USB/RS232	11,46

## 10. Devices for radio data transmission

10.1. GSM/GPRS MODEM Fastrack (module, cable RS-232, 230V AC adapter, cable for car DC supply, antenna)	170,04
accessory to MODEM Fastrack: antenna	7,08
accessory to MODEM Fastrack: power supply	13,13
accessory to MODEM Fastrack: RS-232/DB15 cable	2,08

## 11. Interfaces for the LAB-EL meters, PC software

11.1. LAB-EL CALCULATOR OF MOISTURE (PC program)	91,69
11.2. Program LOGGER for PC for data readout from a recorder, graph, archive for: LB-515 (interface LB-513, LB-514), LB-516, LB-520 (interface LB-521), LB-726, LB-755A, logger PASTYLKA: 21G, 21H, 22L i 23 (interface LB-513P)	77,52
11.3. PROGRAM SCADA LBX/STANDARD (processes visualization, synoptic screens, alarms, the archiving, diagrams, etc.) price depends on a program configuration, available modification to individual client's requirements	
basic module-visualization of 1 device	77,52
support module of an additional measurement device series LB-xxx	19,80
support module of an additional client to a server	72,93
support module of an additional MODBUS register (universal driver)	4,17
for each additional 12 months of the warranty extension counted from the day of ending the last warranty period	30% of the initial price of the set
11.11. PROGRAM "BASIC" - for connecting various LAB-EL devices to PC - price included in devices price	

## 12. The masts for the anemometers, equipment, the books, and other

12.1. METEOROLOGICAL CAGE LB-719 for a HYTHEROGRAPH LB-710R	98,56
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an extension arm with a handle for a mast (1 inch pipe)	35,63
12.2. MRS-04 - Pipe mast, folding, with the stays, of height 4 m, for an anemometer	524,29
12.3.1. MK-10 - Truss mast, with the stays, of height 10 m	405,09
12.3.2. MK-12 - Truss mast, with the stays, of height 12 m	431,56
12.3.3. Wind sensor mounting arm	56,89
12.3.4. Mounting of the mast (without the concret base)	216,72
12.3.5. Mast transportation (proce for 1 km)	0,31
12.3.6. Building project for the mast for building permit	595,97
12.3. Optical-acoustic signaler LD-96	10,21
12.4. A transition DB25/DB9 with a cable LB-373	5,83
12.5. REGULATION TECHNIQUE, REGULATOR LB-600, Automation of the processes... (a book)	5,21
12.6. MICROCLIMATE REGULATION IN A ROOM (a book)	8,75
12.7. PROTECTOR LB-341 – a module, lighting/ over-voltage protection for a symmetric line up to 24V	18,75
12.8.1. Kabel USB/USB standard cable, 1 m	2,08
12.8.2. Kabel RS-232 standard cable (DB9F/DB8M), 1 m	3,13
12.8.3. Ethernet standrad cable (RJ45/RJ45), 1 m	2,08
12.9. SHIPPING GOODS TO ADDRESS in POLAND by UPS	
parcel with weight up to 30 kg (payments for goods by bank transfer)	6,46
parcel with weight up to 30 kg (postal collection order, amount up to 1000 PLN)	8,13
parcel with weight up to 30 kg (postal collection order, amount from 1000 PLN up to 2000 PLN)	9,38
parcel with weight up to 30 kg (postal collection order, amount from 2000 PLN up to 3000 PLN)	10,21
parcel with weight up to 30 kg (postal collection order, amount from 3000 PLN up to 5000 PLN)	12,29
12.14. Alphanumeric 3-color display type 105, size 66 x 10 cm	181,50

### **13. Calibration and calibration with adjusting services of the devices in the outside laboratories, with LAB-EL mediation**

13.1. CALIBRATION IN THE CENTRAL OFFICE OF MEASURES – calibration of the hytherographs:	
Hytherograph calibration	291,32
13.2. CALIBRATION IN THE AIR FORCE INSTITUTE OF TECHNOLOGY of the barometers and the pressure meters	
calibration of the barometer model LB-750W in 13 points: 10, 100, 200, 300, ....., 1100, 1200 hPa	204,21
calibration of another models	price to be settled
13.3. CALIBRATION IN THE INSTITUTE OF ENERGY - calibration of the thermometers:	
Price depends on a number of sensors checked and checked temperatures	minimum 75,23
13.4. CALIBRATION IN PAN - calibration of the anemometer	140,66

**14. Calibration of hytherographs, hygrometers, thermometers, psychrometers, dew point hygrometers, barometers, in the Humidity, Temperature and Pressure Laboratory LAB-EL - Accredited Laboratory - AP 067**



AP 067

**Temperature, humidity**

Calibration of hytherographs, hygrometers, thermometers and psychrometers for measurement of relative humidity and/ or air and gasses temperatures. Calibration is offered in the scope: relative humidity 10%..98% RH, temperature -10°C...+60°C and dew point temperature -10°C...+40°C. Standard calibration points: 22°C: 29%, 57% i 85%, 5°C: 57%, 42°C: 57%. Calibration is performed in a climate chamber.

Calibration of the electronic thermometers (with outside sensors on the cables) and the platinum sensors of the Industrial resistance thermometers is offered in the scope: -90°C...+250°C and in the temperature -195,8 °C. Standard calibration points a) -20°C, +35°C, +80°C, b) 0°C, -20°C, -50°C. c) -20°C, 0°C, +35°C, +80°C, d) +100°C, +150°C, +195°C. Calibration is performed in a liquid thermostat or dry thermostat.

Discount for calibration from 2 to 4 devices (similar probes, sensors) in the same points	-10%
Discount for calibration from 5 to 8 devices (similar probes, sensors) in the same points	-20%
Discount for calibration from 9 devices (similar probes, sensors) in the same points	-30%

14.1. Meter conservation before next calibration – upon request 16,67

14.2. Calibration of a hytherograph, a hygrometer, or a thermometer in a climate chamber.

First calibration of a hytherograph or a hygrometer LAB-EL (5 standard points)	31,26
First calibration of a hytherograph LB-103, LB104 (5 standard points)	31,26
First calibration of a thermometer LB-105P (1 internal sensor, 1...3 standard points)	31,26
First calibration of a button logger LB-515P (standard points)	31,26
First calibration of a LAB-EL device, for each additional non standard calibration point	31,26
Calibration of a typical* hytherograph or a hygrometer (5 standard points)	72,93
Calibration of an non typical* hytherograph or a hygrometer (5 standard points)	102,11
Payment for each non standard calibration point of a hytherograph or a hygrometer	58,35
Recalibration of the mini temperature recorder LB-516T, LB-516AT (1...3 standard points)	52,10
Recalibration of a hytherograph LB-103, LB-104 (standard points)	52,10

\*) **Typical** hytherograph-a hytherograph produced by LAB-EL or different, which allows on constant temperature and humidity reading without a need for repeating the manual operations.  
**Not typical** hytherograph is a device, which independently switches itself off after some time and requires repeating the manual operation on its keyboard in order to obtain a measurement result.

14.3. Thermometer calibration in a liquid or dry thermostat.

First calibration of a LAB-EL thermometer (1...3 standard points)	31,26
First calibration of a thermometer LAB-EL (4 standard points)	39,59
First calibration of a LAB-EL thermometer (1...3 non standard points)	37,51
First calibration of a thermometer LAB-EL, for each additional non standard point of calibration	10,42
First calibration of a thermometer WT-1 (1...3 standard points)	31,26
First calibration of a thermometer LB-103 (1 internal sensor, 1...3 standard points)	31,26
First calibration of a thermometer LB-105P1 (1 external sensor, 1...3 standard points)	31,26
First calibration of a thermometer LB-105P2 (2 external sensors, 1...3 standard points)	41,68
Thermometer calibration (1 standard point)	31,26
Thermometer calibration (2 standard points)	52,10
Thermometer calibration (3 standard points)	72,93
Thermometer calibration (4 standard points)	81,27
Recalibration of a thermometer LB-103 (1 internal sensor, 1...3 standard points)	41,68
Recalibration of a thermometer LB-105P1 (1 external sensor, 1...3 standard points)	41,68
Recalibration of a thermometer LB-105P2 (2 external sensors, 1...3 standard points)	52,10

Recalibration of a thermometer WT-1 (1...3 standard points)	41,68
Payment for each non standard calibration point of a thermometer	31,26

14.4. Pyrometer (non contact thermometer) calibration (any pint in the range -15°C... +500°C)	
1 calibration point	19,80
2 calibration point	27,09
3 calibration point	34,38
each next calibration point	11,46

14.5. Calibration of climatic chambers	price after agreements the scope of works
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14.6. Calibration in situ in Client location	price after agreements the scope of works
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## **Pressure**

Calibration of the barometers is offered in the scope 700 hPa ... 1100 hPa.  
Standard calibration points: 700, 780, 860, 940, 1020 i 1100 hPa (for barometers with a scope 800 ... 1100 hPa) or 850, 900, 950, 1000, 1050 i 1100 hPa (for barometers with a scope 850 .. 1100 hPa).

Calibration of the differential pressure meters is offered in the scope +/- 1400 Pa.

Discount for calibration from 2 to 4 meters	-10%
Discount for calibration from 5 meters	-20%

14.7. Calibration with an adjustment of the barometers (in the scope provided above):	
First calibration with an adjustment of a LAB-EL pressure meter (up to 6 calibration points)	31,26
Pressure meter calibration (up to 10 calibration points)	72,93
Payment for each additional point of pressure meter's calibration	12,50
14.8. Preparing of duplicate of Calibration Certificate in Polish language	10,42
14.9. Preparing of duplicate of Calibration Certificate in English language	20,84

## **Gas flow**

Maximum surface size of the calibrated anemometer in the scope of accreditation is 90 cm<sup>2</sup>.

14.10. Thermo-anemometer calibration in the scope of accreditation 0,3...40 m/s	
14.11. Propeler anemometer calibration in the scope of accreditation 1...40 m/s	
Suggested calibration points: 1, 2,5, 5, 7,5, 10, 15, 20, 25 m/s	
Anemometer calibration - first point of calibration in the scope of accreditation	31,26
Anemometer calibration - each next point of calibration in the scope of accreditation	8,34
Anemometer calibration - each point outside of the scope of accreditation	4,17

## **15. Calibration of another meters in in the Humidity, Temperature and Pressure Laboratory LAB-EL (without accreditation)**

15.1. Calibration with an adjustment of the pressure meters (in the scope 0 ... 700 kPa):	
First calibration with an adjustment of a LAB-EL pressure meter (up to 6 calibration points)	10,42
Calibration with an adjustment of a pressure meter (up to 10 calibration points)	37,51
Calibration (without an adjustment) of a pressure meter (do 10 calibration points )	25,01
Payment for each additional calibration point of a pressure meter	8,34

## 16. Microclimate measurements of rooms - Accredited Laboratory - AB 679

Price after agreements the scope of works



AB 679

### REMARKS TO THE OFFER:

\* Attention: Scope of work temperatures of the standard PCV cables equals:  
in permanent installations: -30°C...+70°C, and in mobile connections -5°C...+70°C.  
Upon request – the cables for an extended scope of temperature are available: silicone -50°C...+180°C  
and teflon -80°C...+250°C.

**\*1) To the net prices provided above one needs to add vat tax 23% (inside Poland) or 0% (for export or EU delivery).**

**\*2) Devices can be connected to the PC with using of the following software:**

**\*2a) "LBX" program** (not included in the device price, offer - look at point 11.3 in the price-list)

**\*2b) "LOGGER" program** (not included in the price of the device, offer - look at point 11.2 in the price-list)

**\*2c) "DEDICATED" programs** (included in the price of devices)

LOGGER or LBX programs are covered by a 24-month warranty calculated from the date of invoice issue.

The guarantee authorizes you to download the updates from the website: <http://www.label.pl/po/ix.soft.html>.

After this period, we offer a subscription for further updates in accordance with the offer from the price list. 11.3.

Programs can be downloaded from the address: <http://www.label.pl/po/ix.soft.html>

**\*3) The meters' price does not include the calibration certificates (offer for certificates see pint 13...15).**

**\*4) New hytherographs, hygrometers, thermometers and barometers produced by LAB-EL can have the calibration certificates calibrations from an accredited Calibration Laboratory LAB-EL in a promotion price 150 PLN (37 EUR).**

- it does not apply to LB-103, LB-104, WT1 and LB-515P, for which a promotion price for a certificate is EUR:

31,26

- it does not apply to barometer LB-750W, calibrated in external laboratory (see point 13.2).

**\*5) Standard sensor in the thermometers is of TL-2 type (diameter 5,8 mm, length 100 mm, cable length 1 m).**

**\*6) Sensor TL-2 with 1 meter cable. Additional cable length - add 1,20 EUR/m.**

**\*7) Additional length of a casing shield for the standard TL-2 sensors – additional payment 0,25 EUR/cm.**

**\*8) Offer's realisation period: from 1 day to 2 months.**

**\*9) Payment – prepayment by wire transfer or in cash.**

**\*10) We assure 24 months warranty for our products and a full after warranty service performed at the company's headquarters.**

**\*11) For the not LAB-EL production devices we assure 12 months warranty.**

**\*12) Transport and insurance are paid by a client (prices EXW).**

**\*13) We provide assistance in installing / configuring the devices.**

**\*14) We perform device modifications according to a client's individual needs.**

**\*15) This offer is not an offer in the understanding of the Civil Code.**

**\*16) We reserve a right to change the prices that results from the changes in the exchange rates during a period in which this price list is being effective.**

**\*17) The price list is valid only until a new one is announced.**

**\*18) The prices were calculated based on the NBP exchange rate tables dated: 2022-03-02  
for the following exchange rates PLN/EUR: 4,7989**

**\*19) Standard cables are not included in the sets, must be ordered separately (USB, Ethernet,...)**

**\*20) All orders and agreements should be in written form only and should be signed by all persons authorised by law.**

**\*21) Information about technical parameters of the devices offered available at:**

<https://climateloggers.com/>

<https://www.label.pl/>



**Check our actual prices in the Internet:**