

Annex no. 1

Request for proposal 3/POLON/2023

Technical parameters

Order subject:

The order includes the procurement of measuring equipment made up of the components shown. as part of the project entitled "POLON (POLski mOduł Napędowy)".

Name of the equipment and CPV code and name:

Digital Multimeter

Code 38341300-0: Instruments for measuring electrical quantities

Configuration requirements :

PARAMETERS	VALUE	
Measuring ranges	100nV do 1000V 100pA do 10A 1uohm do 120Mohm 0,1 pF do 120 uF 3 do 300 kHz	
Measurements dimensions view	6.5 Digits	
Display	WVGA TFT	
External Triger input	Response time 1us	
Digital Measurement Analysis	Capture and Analyse Voltage or Current Transitions	
Internal memory of measurements	For 7 million readings	
Accuracy	DCV 25PPM for 1 year	
Master control software	Required	
Host Interface	USB-TMC 2.0 , LXI/Ethernet	
Type of master communication	Emulation SCPI Keysight 34401A	
Manufacturer's warranty	36 months	

Digital Oscilloscope

Code 38342000-4: Oscilloscope

Configuration requirements :

PARAMETERS	VALUE	
Sampling rate	2GSPS	
Number of channels	2 analog 1 triggering	
Display	WVGA TFT	
Rise time	3.5ns	
Bandwidth	100 Mhz	
Function generator	Up to 20Mhz or more	

Protocol analysis	I ² C, SPI, UART/RS-232, CAN, LIN	
Mathematical analysis	add, subtract, multiply, divide, FFT , low pass filter	
Host Interface	LAN, USB 2.0	
Display memory depth	2Mpts	
Manufacturer's warranty	36 months	

Card PCI - Real Time Server

Code 48822: Computer servers

Configuration requirements :

PARAMETERS	VALUE	
Interface	PCI Express	
Output	IRIG-B/AFNOR time code outputs RS-232, PPS and PPM	
Receiver GPS	GNSS	
Driver	The driver package includes a synchronization service that runs in the background and adjusts the Windows or Linux time continuously and invisibly	
Operating system	Windows, Linux	
Antenna	Included: 40dB Multi GNSS	
Time scale	UTC/local, GPS time, TAI	
Accuracy	< ±100ns (TCXO, OCXO LQ)	
Trigger input	Resolution: 200 nsec,	
Manufacturer's warranty	12 months	

Serial Port Server

Code 48822: Computer servers

Configuration requirements :

PARAMETERS	VALUE	
Number of output channels	32	
Insulation	1,5 kV	
Windows Real COM	For Win 10/11	
Master control software	Required	
Serial Standard	RS-232, RS-422, RS-485	
Ethernet interface	10/100BaseT(X) Ports	
Supply Voltage	20 do 72VDC	
Manufacturer's warranty	12 months	

Entry-level server

Code 48822: Computer servers

Configuration requirements :

PARAMETERS	VALUE	
Processor	Class E5 x 2pcs	
Ram	>=32GB DDR4	
Number of pockets	4x 3,5" (empty)	
Controller	h730	
Case	1U 24 cale Rack	
Ethernet interface	2 x 100/1000BaseT(X) Ports	
Warranty	12 months	

Rack Cabinet 19" + accessory

Code 31213300: Cable cabinets

Configuration requirements :

PARAMETERS	VALUE	
Cabinet size	19" 42U/600x800	
Producer	Pulsar	
Execution of the frame and door panels	SPCC 1.2 mm, colour RAL 9004	
Execution of fastening profiles	SPCC 2mm	
Front door	Tempered glass 5mm	
Shelves	19" 350mm x 7pcs	
Ventilation panels	Lanberg AK1503B x 2pcs	

Power supply

Code 38000000: Laboratory equipment, optical and precision (except glass)

Configuration requirements:

PARAMETERS	VALUE	
Channels number	4	
Output voltage max	32V	
Output	10A	
Master control software	Required	
Nominal Power	> 380W	
Ethernet interface	10/100 Base TCP/IP	
Supply Voltage	230VAC	
Warranty	36 months	
Resolution for settings	1mV and 0.1A	