



# Multi Channel Analyzer **BOSON**

# Multi Channel Analyzer

## BOSON



### FEATURES

- Boson MCA acquires and displays spectra with overlapping by energy range up to 1000 times
- No resolution deterioration at operation in the beginning of spectrum energy range
- Stable operation with preamplifiers of TPR type with output voltage swing up to +/- 10 V and reset duration up to 250 us
- Automated P/Z adjustment
- Improved dead time correction
- Spectrum stabilization
- Setting and control of all parameters using colour LCD display with touch screen
- Complete remote control of Boson MCA via software from PC
- Base Line Restorer (BLR)
- Operation with preamplifier TPR

### COMPLETE SET

- Boson MCA with software,
- Color LCD display with touchscreen,
- HV power supply unit,
- Preamplifier power supply unit (+/-12 V; +/-24 V),
- MCA state display indicator
- Connectors: input; protection control output analogue and digital. Available interface to connect to computer: USB, LAN, RS-232. Connector for preamplifier power supply unit. Two HV connectors for detector HV power supply. GATE signal connector. Outer power supply connector.
- AC/DC adaptor
- Boson MCA has control for all operation modes by the program installed in remote computer

Parameter	Value
Shaping time constant	4 shaping time constant 0,5...24 us (by request))
Coarse gain	5,10,20,40,80,160,320,640 (by request)
Fine gain	1 ... 2
Input signal polarity	+/-
TRP preamplifier support	Yes
Integral nonlinearity	+/- 0,025%
Differential nonlinearity	<1%
Gain temperature coefficient	<50 ppm/° C
MCA, chn	16k
Input count rate	up to 200000 cps
Power preamp	+/- 12V 60mA +/- 24V 40mA
HV out	+/-5000 V or +/-2000 V /0.5mA
Power supply	+9... 18 V; 1 A
Consumed power	12 W
Indication	TFT color touchscreen 3.2"
Communication interface	USB; Ethernet; RS-232 or I/O control by request