

TECHNICAL SPECIFICATIONS

Manufacturer:	Micromed S.p.A. via Giotto 2 - 31021 - Mogliano Veneto (TV) - Italia tel. 041-5937000 fax. 041-5937011 E-mail: micromed@micromedgroup.com
Device:	SD LTM 32 PLUS / SD LTM 64 PLUS acquisition devices
Classification according to EN 60601-1:	Continuous operation. Ordinary protection against liquids. Device not suitable for use in presence of flammable anesthetic mixtures with air, oxygen or nitrous oxide. SD LTM 32/64 PLUS : class II/internal power supply device, type BF;
Conformity to standards:	IEC 60601-1, IEC 60601-1-2, IEC 60601-2-26
Power Supply:	SD LTM 32/64 PLUS : 2 x 1.5VDC AA, non-rechargeable alkaline battery, and 5VDC exclusively from BQ USB PLUS , BQ USB MULTI or BOX TERMINAL MULTI interface. Rechargeable internal Lithium battery
Internal voltage:	SD LTM 32/64 PLUS : 2.8V, BQ USB PLUS / BQ USB MULTI : 5V, BOX TERMINAL MULTI : 24V and 5V
Input power:	1,5W (SD LTM 64 PLUS);
Number of channels:	64 analog (8 configurable as common reference or differential)/ 32 analog (8 configurable as common reference or differential) 3 channels on serial port, 9600 Baud, optically isolated for the oximeter 2 channels DC (for the acquisition from external devices) 2 channels for Thorax/Abdomen inductive band Tri-axial accelerometer (body position sensor)
Auxiliary serial port	1 auxiliary serial port for connection/communication with specific auxiliary device (i.e. SD LTM STIM)
Amplifiers:	32/64 channels with differential inputs divided in 8 configurable as differential or common reference and 24/56 with fixed common reference
Noise:	0.2 μ V r.m.s. @ 256 Hz Sampling Rate
Input impedance:	$>10^9 \Omega$ (amplifier)
CMRR:	$>100\text{dB}@50\text{Hz}$ between G1 and all the other inputs
High-pass filter:	DC, 0.15Hz
Low-pass filter:	$0.27 * f_{\text{sampling}}$
Sampling frequency:	16384, 8192, 4096, 2048, 1024, 512, 256 Hz
A/D conversion:	24bit for EEG channels, 10bit for DC IN channels
Max EEG input (resolution):	full scale range: ± 3.2 , ± 25.6 , ± 204.8 , ± 1638.4 mV resolution capability to 44nV (ADC 24 bit)
Max DC IN input (resolution):	4.8V (4.69 mV/digit)