

	MANUFACTURER				
	KW Apparecchi Scientifici S.r.l.				
	Via della Resistenza 119 - 53035 Monteriggioni (SI) - Italy				
	MODEL				
	K64 HPL				
	Upright ULT plasma freezer -80°C				
	CE Certification		Medical Device Class IIa (MDD 93/42 - 2007/47/CE)		
	HS Code		84184080		
	TECHNICAL CHARACTERISTICS				
	Net Storage Volume		708 lt		
	Racks Max Capacity		20		
	2" Cryoboxes Max Capacity		500		
	1,5/2ml Vials Max Capacity		50.000		
	Temperature Range		-40°C / -86°C		
	Ambient Operating Temperature		+10°C/+43°C, 90% RH		
Power Supply		230V ±10% - 50Hz			
Max Absorbed Power		800 W			
Daily Energy Consumption		11,80 kWh/24h			
Noise Level		< 52 dB			
STRUCTURE					
Internal Surface	AISI 304 Stainless Steel			Standard Adjustable Shelves	n°3 in AISI 304 stainless steel + base (max load kg 55 each)
External Surface	Cold-rolled steel with anti-corrosive coating			Compartments	4
External Dimensions	W 1160 x D 1070 x H 2050 mm			Insulated Inner Doors	4
Internal Dimensions	W 802 x D 690 x H 1280 mm			Handle	Ergonomic design with integrated key lock system
Weight	340 kg			Door Type	Solid type (with n°3 hinges for max stability)
Shipping Size (with wooden crate)	W 1300 x D 1300 x H 2300 mm			Door Sealing	Heated triple-layer silicone gasket
	450 kg			Standard Equipment	n°4 wheels (n°2 pivoting)
Int/Ext Edges	Rounded for easy cleaning				Internal/External porthole (Ø25 mm)
Insulation	140 mm (CFC-free PUR foam)				External vacuum relief valve
REFRIGERATION SYSTEM					
Cooling System	Fully sealed circuit; static cooling with n°2 hermetic compressors (with thermal protector) in cascade system				
Condensing System	Air-cooled condenser with filterless design to reduce routine cleaning activities				
Refrigerant Gases (HC)	1° Stage	R1270		2° Stage	R170
Defrost	Manual				
DIGITAL CONTROL SYSTEM					
HPL (Microprocessor Technology)					
Display	7" touch screen LED display				
T Regulation Accuracy	± 0.1°C				
Thermal Probes	n°2 thermal probes RTD Pt100 (stainless steel)				
Access Control	PIN code protection for ON/OFF switching and access to the user/service menu				
Features	The main screen displays the T Set Point, high/low temperature limits, battey level, date and time, current voltage and real-time graph				
	Data logger function with automatic recording of temperature data (at 30-seconds intervals) and events				
	Internal memory (further expandable via SD card) capable of recording data for a minimum period of 10 years				
	Data history menu for consultation and selection of temperature data records, events and alarms of the device				
	ECO mode (possibility to set an automatic increase of the T set point in a settable time interval, to reduce energy consumption)				
	Back-up battery with self-charging circuit (48h autonomy in case of power failure)				
Connectivity	In-built power stabilizer with linear voltage regulation (±20 Volts)				
	USB port		RJ45 port for LAN connection (TCP/IP Modbus) to BMS/SCADA		
	Remote alarm contacts		SD card slot		
	SIM card slot				
Main Alarms List (Audio/Visual)	Power failure		Temperature probes failure		
	High/Low temperature (freely settable limits by the user)		Back-up battery failure / low charge		
	Door open		Thermal protection warning		
	High pressure in condensation		High compressor usage warning		
	Abnormal ambient temperature		Abnormal voltage		
	High temperature in condensation		Dirty condenser		
OPTIONAL ACCESSORIES AVAILABLE ON REQUEST					
n°4 pivoting wheels (n°2 fronts with brakes)			Weekly cycle chart disk recorder (n°52 spare paper disks included)		
n°4 pivoting wheels (n°2 fronts with leveling feet)			Power voltage stabilizer		
Additional internal/external porthole (Ø 25 mm)			Additional mains water condensation device		
Additional shelf in AISI 304 stainless steel			Condenser air filter		
Additional insulated inner door			GSM Module with SIM card bridge		
24V CO2 backup system for activation in case of mechanical failure			Wi-Fi kit (TCP/IP Modbus) for connection to BMS/SCADA and remote monitoring		
24V LN2 backup system for activation in case of mechanical failure			Electric lock for door opening with PASSWORD		
12V CO2 backup system for activation in case of mechanical/power failure			Electric lock for door opening with BADGE/RFID		
12V LN2 backup system for activation in case of mechanical/power failure					