




Libero. The Overview of the Models.

Features / Models	Libero Ti1	Libero Ti1-S	Libero Ti1-L	Libero Te1-N
Picture				
Type	Mobile Temperature Data Logger			
Part Number	4510	4511	4512	4514
Application Area	Transport monitoring for cold chain & ambient temperature goods		Standard temperature monitoring	Temperature monitoring for dry ice shipments
Recording Options	Multiple use	Single use	Multiple use	Multiple use
Recording Mode	<ul style="list-style-type: none"> Start/stop mode Loop mode (not for Ti1-S) 			
Temperature Measurement Range	-35°C to +70°C			-80°C to +85°C
Type of probe	Internal NTC probe			Libero NTC probe with USB connector, cable lengths: 50cm, 80cm or 3m
Temperature Accuracy	<ul style="list-style-type: none"> +/- 0.2°C for the -10° to 25°C +/- 0.5°C for the ranges -35 to -10°C and 25° to 70°C 			<ul style="list-style-type: none"> +/- 0.2°C in the range of -10° to 25°C +/- 0.5°C in the range of -35° to -10°C as well as 25° to 70°C +/- 1.8° for the range of -35°..-80°C
Resolution	0.1°			
Memory Capacity	16'000 measuring data points			
Programmable measurement interval and display renewal	1 to 60 minutes, user programmable		2 to 60 minutes, user programmable	
Programmable Temperature Alarms	a) 2 alarm limits or b) 5 multiple alarm ranges, conform with PDA Technical Report No 39			
Start-Up Delay	0 minutes to 1 day			
Battery (built-in) Life time	3.6 V Lithium: 400 days	3.0V Lithium: 100 days	3.6 V Lithium: 3 years	
Display	Multifunction LCD, size: 23.5 x 23.5 mm			
PDF Data Logger	Built-in PDF file generator that automatically establishes an evaluation file including chart. Complies to the ISO Standard 19'005-1 Document Management for the long-term preservation of electronic documents			
Evaluation Report (Adobe® PDF/A)	<ul style="list-style-type: none"> Text area for any additional information (8 lines by 80 characters), a chart visualizing the temperature curve and the raw data 			
Display Functionality	<ul style="list-style-type: none"> Configuration Profile Identification Current temperature measurement (last stored value) Start & End marking functionality with TRANSIT & ARRIVED buttons Status OK or ALARM at exposure Indicator whether limit value had been exposed Remaining battery life in days Statistical Data: (min, max, average, MKT) 			
Accessories	Simple bracket		<ul style="list-style-type: none"> Simple bracket Alarm bracket for visual & acoustic alarming 	
Interface	USB – PC Universal Serial Bus			
Case	ABS plastic material			
Protection Class	IP 54			
Dimensions / Weight	95 x 40 x 12 mm / 40g		102 x 40 x 19 mm / 45 g	102 x 40 x 19 mm / 45g
Datalogger Configuration	LIBERO Configuration Utility and LIBERO SmartStart, free of charge on www.pdf-logger.com			