

Sentinel HL



Driverless Configuration Keys	Basic	Pro	Max	Max	Time	Max	Max	Max	Drive microSD**
FORM FACTOR	Mini	Mini	Mini	Micro	Midi	Board	ExpressCard	Chip	Midi
SECURITY AND CRYPTOGRAPHIC ALGORITHMS									
Unique 32-Bit ID		✓	✓	✓	✓	✓	✓	✓	✓
AES 128-Bit Encryption	✓	✓	✓	✓	✓	✓	✓	✓	✓
64,000 Encryption Keys	1	✓	✓	✓	✓	✓	✓	✓	✓
On Chip Execution (AppOnChip)	✓*	✓*	✓	✓	✓	✓	✓	✓	✓
LICENSING MODELS SUPPORT									
Perpetual	✓	✓	✓	✓	✓	✓	✓	✓	✓
Feature-Based		✓	✓	✓	✓	✓	✓	✓	✓
Pay-Per-Use		✓	✓	✓	✓	✓	✓	✓	✓
Network Concurrency		✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓*
Time-Based		✓*	✓	✓	✓	✓	✓	✓	✓
Custom or Remote Desktop		✓	✓	✓	✓	✓	✓	✓	✓
CLOCK									
Real Time Clock					✓				
V-Clock		✓*	✓	✓	✓	✓	✓	✓	✓
Battery Life Warranty					4-Years				
Real Time Clock Accuracy (at 25±5°C)					≤12.8 minutes/year				
MEMORY									
Protected Read / Write Memory		112 Bytes	4KB	4KB	4KB	4KB	4KB	4KB	4KB
Read Only Memory (ROM)		112 Bytes	2KB	2KB	2KB	2KB	2KB	2KB	2KB
Dynamic Memory			25KB	25KB	25KB	25KB	25KB	25KB	25KB
Data Retention		At Least 10 Years	At Least 10 Years	At Least 10 Years	At Least 10 Years	At Least 10 Years	At Least 10 Years	At Least 10 Years	At least 10 years
Write Cycles (EEPROM / Flash)		At Least 1,000,000	At Least 1,000,000	At Least 1,000,000	At Least 1,000,000	At Least 1,000,000	At Least 1,000,000	At Least 1,000,000	At least 1,000,000
Max. licensable modules (Features, depending on license complexity)		11-39	240-2160	240-2160	240-2160	240-2160	240-2160	240-2160	240-2160
Flash (Read / Write) per second									* depends on microSD card
Flash Memory									Support microSD card up to 64GB
PHYSICAL SPECIFICATIONS									
Default Color	Blue	Purple	Green	Green	Black	Black	Silver Metal Polycarbonate /Stainless Steel	Black	Green
Plastic Case Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate /Stainless Steel	Polycarbonate	Polycarbonate
Operating Temperature	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-20°C to 60°C -4°F to 140°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	0°C to 60°C 32°F to 140°F
Humidity Rating	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%
Power Consumption - operating / standby	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	20mA / < 0.5 mA	25mA / < 0.5 mA	20mA / < 0.5 mA	200mA max
Dimensions L x W x H (in mm)	40.5 x 16 x 8	40.5 x 16 x 8	40.5 x 16 x 8	18 x 12.2 x 4.5	52 x 16 x 8	15.2x8x12.4	75 x 34 x 5	8.2 X 5.3 X 2.1	52x16x8
Weight (in grams)	5.63	5.63	5.63	1.64	7.36	1.23	15	N/A	6.98
CERTIFICATION									
Safety Certifications	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/ NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, AS/NZS 60950.1	IEC 60950-1, EN 60950-1, UL 60950-1, AS/NZS 60950.1
Certification / Compliance	RoHS, WEEE, REACH	RoHS, WEEE, REACH	RoHS, WEEE, REACH	RoHS, WEEE, REACH	RoHS, WEEE, REACH	RoHS, WEEE, REACH	RoHS, WEEE, REACH	RoHS, REACH	RoHS, WEEE, REACH
EMC Certifications	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI	CE, FCC, VCCI

*Requires a paid upgrade.

**Supported only with Sentinel LDK 7.4 and later.

Sentinel HL



HASP Configuration Keys	Basic	Pro	Max	Max	Net	Time	NetTime	Drive microSD**	Max	Max	
FORM FACTOR	Mini	Mini	Mini	Micro	Mini	Midi	Midi	Midi	Chip	ExpressCard	
SECURITY AND CRYPTOGRAPHIC ALGORITHMS											
Unique 32-Bit ID		✓	✓	✓	✓	✓	✓	✓	✓	✓	
AES 128-Bit Encryption	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
64,000 Encryption Keys		✓	✓	✓	✓	✓	✓	✓	✓	✓	
LICENSING MODELS SUPPORT											
Perpetual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Feature-Based		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Pay-Per-Use		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Network Concurrence					✓		✓				
Time-Based						✓	✓				
Custom or Remote Desktop		✓	✓	✓	✓	✓	✓	✓	✓	✓	
CLOCK											
Real Time Clock						✓	✓				
Battery Life Warranty						4 Years	4 Years				
Real Time Clock Accuracy (at 25°± 5°C)						≤12.8 minutes/year	≤12.8 minutes/year				
MEMORY											
Protected Read / Write Memory		112 Bytes	4KB	4KB	4KB	4KB	4KB	4KB	4KB	4KB	
Read Only Memory (ROM)		112 Bytes	2KB	2KB	2KB	2KB	2KB	2KB	2KB	2KB	
Backward Compatibility Memory		112 Bytes	4KB	4KB	4KB	4KB	4KB	4KB		4KB	
Data Retention									At Least 10 Years		
Write Cycles (EEPROM / Flash)									At Least 1,000,000		
Max. licensable modules (Features, depending on license complexity)		39	231	231	231	231	231	231	231	231	
Flash (Read / Write) per second								*depends on microSD card			
Flash Memory								Support MicroSD card up to 64GB			
PHYSICAL SPECIFICATIONS											
Default Color	Blue	Purple	Green	Green	Red	Black	Red	Green	Black	Silver Metal	
Plastic Case Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate		Polycarbonate /Stainless Steel	
Operating Temperature	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	-20°C to 60°C -4°F to 140°F	-20°C to 60°C -4°F to 140°F	0°C to 60°C -32°F to 140°F	-25°C to 85°C -13°F to 185°F	-25°C to 85°C -13°F to 185°F	
Humidity Rating	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	0-95%	
Power Consumption - operating / standby	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	50mA / < 0.5 mA	200mA max	20mA / < 0.5 mA	25mA / < 0.5 mA	
Dimensions L x W x H (in mm)	40.5 x 16 x 8	40.5 x 16 x 8	40.5 x 16 x 8	18 x 12.2 x 4.5	40.5 x 16 x 8	52 x 16 x 8	52 x 16 x 8	52 x 15 x 8	8.2 x 5.3x2.1	75 x 34 x 5	
Weight (in grams)	5.63	5.63	5.63	1.64	5.63	7.36	7.36	6.98	N/A	15	
CERTIFICATION											
Safety Certifications	IEC 60950-1, EN 60950-1, UL 60950-1, CAN/CSA-C22.2 NO.60950-1A, AS/NZS 60950.1								EN60950	IEC 60950-1, EN 60950-1, UL 60950-1, AS/NZS 60950.1	
Certification / Compliance	RoHS, WEEE, REACH								RoHS; REACH	RoHS, WEEE, REACH	
EMC Certifications	CE, FCC, VCCI, KCC-REM-SFN-HLMax	CE, FCC, VCCI, KCC-REM-SFN-HLMax	CE, FCC, KCC, VCCI	CE, FCC, VCCI, KCC-REM-SFN-HLMaxMicro	CE, FCC, VCCI, KCC-REM-SFN-HLMax	CE, FCC, KCC, VCCI	CE, FCC, VCCI, KCC-REM-SFN-HLTime	CE, FCC, VCCI		CE, FCC, KCC, VCCI	

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