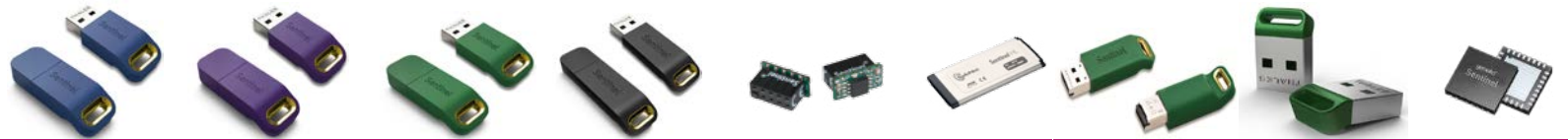


# Sentinel HL

Driverless Configuration Keys



|   | Basic   | Pro   | Max   | Time   | Max  | Max  | Drive microSD**                                    | Max   | Max   |  |
|---|---|---|---|--|--|--|--|---|---|--|
| FORM FACTOR   | Mini  | Mini  | Mini  | Midi   | Board  | ExpressCard  | Midi   | Micro   | Chip  |  |
| <b>SECURITY AND CRYPTOGRAPHIC ALGORITHMS</b>                        |   |   |   |  |  |  |  |   |   |  |
| Unique 32-Bit ID  |   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| AES 128-Bit Encryption  | Y   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| 64,000 Encryption Keys  | 1   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| On Chip Execution (AppOnChip-32bit & 64bit Win)                     | Y*  | Y*  | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| <b>LICENSING MODELS SUPPORT</b>                                     |   |   |   |  |  |  |  |   |   |  |
| Perpetual   | Y   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| Feature-Based   |   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| Pay-Per-Use   |   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| Network Concurrency   |   | Y*  | Y*  | Y*   | Y*   | Y*   | Y*   | Y*  | Y*  |  |
| Time-Based  |   | Y*  | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| Custom  |   | Y   | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| <b>CLOCK</b>  |   |   |   |  |  |  |  |   |   |  |
| Real Time Clock   |   |   |   | Y  |  |  |  |   |   |  |
| V-Clock   |   | Y*  | Y   | Y  | Y  | Y  | Y  | Y   | Y   |  |
| Battery Life Warranty   |   |   |   | 4-Years  |  |  |  |   |   |  |
| Real Time Clock Accuracy (at 25± 5°C)                               |   |   |   | ≤12.8 minutes/year   |  |  |  |   |   |  |
| <b>MEMORY</b>   |   |   |   |  |  |  |  |   |   |  |
| 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  |   |   | 390KB   | 390KB  | 25KB   | 25KB   | 25KB   | 390KB   | 390KB   |  |
| 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   | 3484-24386  | 3484-24386   | 240-2160   | 240-2160   | 240-2160   | 3484-24386  | 3484-24386  |  |
| Flash (Read / Write) per second                                     |   |   |   |  |  |  | * depends on microSD card                          |   |   |  |
| Flash Memory  |   |   |   |  |  |  | Support microSD card up to 64GB                    |   |   |  |
| <b>PHYSICAL SPECIFICATIONS</b>                                      |   |   |   |  |  |  |  |   |   |  |
| Default Color   | Blue  | Purple  | Green   | Black  | Black  | Silver Metal   | Green  | Green   | Black   |  |
| Plastic Case Material   | Polycarbonate   | Polycarbonate   | Polycarbonate   | Polycarbonate  |  | Polycarbonate /Stainless Steel   | Polycarbonate                                      |   |   |  |
| Operating Temperature***  | -25°C to 85°C<br>-13°F to 185°F   | -25°C to 85°C<br>-13°F to 185°F   | -25°C to 85°C<br>-13°F to 185°F   | -20°C to 60°C<br>-4°F to 140°F   | -25°C to 85°C<br>-13°F to 185°F  | -25°C to 85°C<br>-13°F to 185°F  | 0°C to 60°C 32°F to 140°F                          | -40°C to 85°C<br>-40°F to 185°F                     | -40°C to 105°C<br>-40°F to 221°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  | 20mA / < 0.5 mA  | 25mA / < 0.5 mA  | 200mA max  | 50mA/<0.5mA   | 20mA/<0.5mA   |  |
| 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   | 52 x 16 x 8  | 15.2x8x12.4  | 75 x 34 x 5  | 52x16x8  | 18x12.2x4.5   | 5.0x5.0x0.9   |  |
| Weight (in grams)   | 5.63  | 5.63  | 5.63  | 7.36   | 1.23   | 15   | 6.98   | 1.64  | NA  |  |
| <b>CERTIFICATION</b>  |   |   |   |  |  |  |  |   |   |  |
| Safety Certifications   | IEC 62368- EN 62368-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, AS/NZS 60950.1 | IEC 62368-1, EN-60950-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, AS/NZS 60950.1 | IEC 62368-1, EN 60950-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, AS/NZS 60950.1 | IEC 62368-1, EN60950-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, AS/NZS 60950.1 | IEC 62368-1, EN62368-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, AS/NZS 60950.1 | IEC 62368-1, EN62368-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, AS/NZS 60950.1 | IEC 62368-1, EN-62368-1, UL 62368-1,AS/NZS 60950.1 | IEC 62368-1, EN 62368-1, UL 62368-1, AS/NZS 60950.1 | IEC 62368-1, EN 62368-1, UL 62368-1, CAN/CSA-C22.2 NO.62368-1 A, 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, WEEE, REACH                                   | RoHS, 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.

\*\*\* The host USB port which powers the hardware key should be compliant with LPS (Limited Power Source) requirement in IEC 62368-1 clause 2.5. The operating temperature of the hardware keys is up to 85°C, and to avoid scalding, do not touch the keys with hands directly when the environment temperature is higher than 50°C.