Remote Monitoring Specification

Sentinel NEXT 1S

Product Number: **XTEMP-3101-0000**

Specifications

Dimensions (HxWxD)	89mm x 60mm x 20mm (3.50" x 2.36" x 0.78")
Weight	102g (3.60 Oz)
Connectors	10-pin Sensor Connector; micro USB for Charging
Battery	Integrated 1000mAh Rechargeable Li-Ion Battery
Wi-Fi Protocols	IEEE 802.11b/g/n
Wi-Fi Models Supported	Wi-Fi Direct, Infrastructure, Remote
Wi-Fi Encryption	WEP, WPA/WPA2, WPA2-Enterprise Personal (PEAPv0/MSCHAPV2, EAP-TTLS)
On Board Data Storage	>2 months with a Once/Minute Sampling Rate
Operating Temperature	0°C to 40°C on Charger -20°C to 60°C on Battery only
Non-operating Temperature	-30°C to 70°C
Relative Humidity	10% to 90%
Certifications	FCC, CE
Ports Used	443(tcp) for Communication 123 (udp) for Time server (Default: pool.ntp.org)
Protocol to Cloud	Sensor communication MQTTS (MQTT over TLS) OTAP and Debugging HTTPS
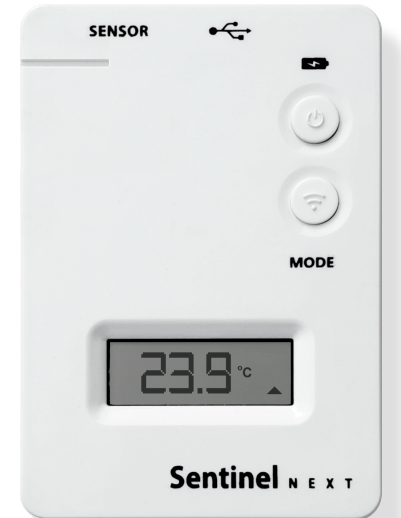
Cloud Provider Google
Sensor Communication WiFi Infrastructure
Protocol MQTTS (secure connection for devices and sensors) ; HTTPS (Debugging and OTAP)

IDS/IPS : Intrusion detection https://cloud.google.com/intrusion-detection-system
WAF: Cloud Armor https://cloud.google.com/armor/
Vulnerability Test: https://cloud.google.com/security-command-center
TLS Version: 1.2
Data: meets 21 CFR Part 11

Cloud Features Metrics and dashboards allowing visibility into the performance of your services with alerting. Health check monitoring for web applications and applications that can be accessed from the internet with uptime monitoring. Support for logs and logs routing with error reporting and alerting.
Audit logs for visibility into security-related events in your Google Cloud account.
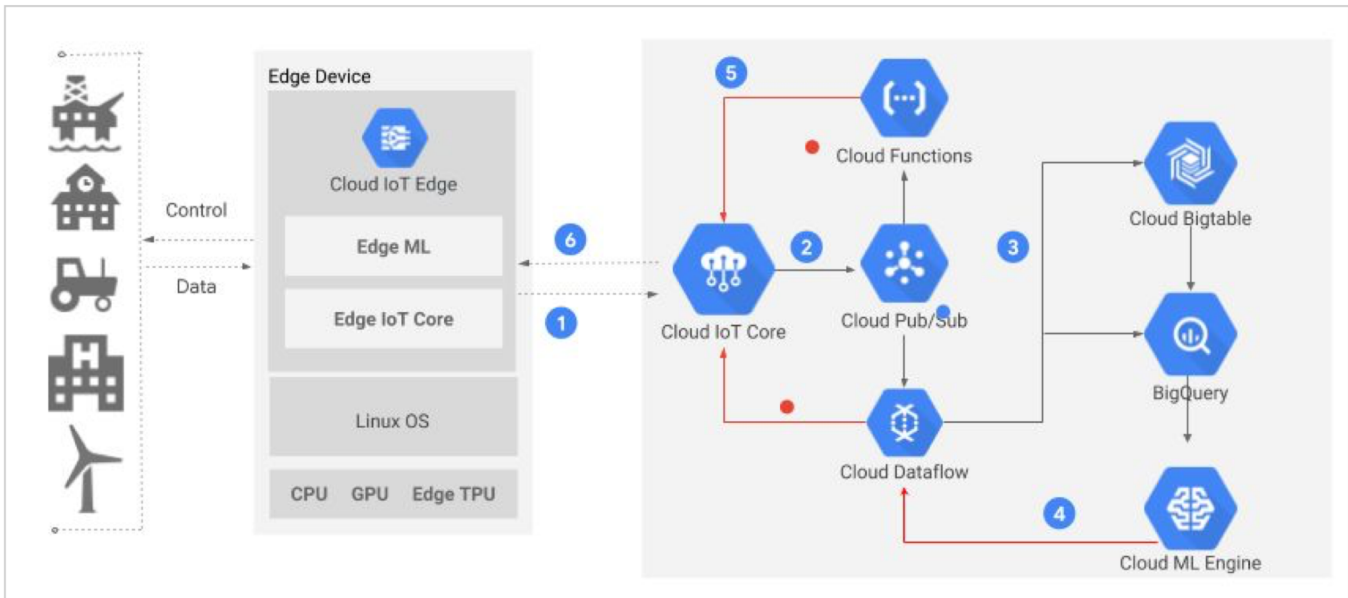Production debugging and profiling.

Aegis Application User Management System
　　　　　　　　　　Sensor Management System
　　　　　　　　　　Sensor Data Storage and Reporting
　　　　　　　　　　Sensor Health Monitoring
　　　　　　　　　　Aggregate Reports for Anomaly Detection

Architecture Google IoT Core