HawkEye 5500 Technical Specifications

Hardware Features

MECHANICAL

SIZE & WEIGHT

– Size: 5.5 x 4 x 1.25 in (13 x 10 x 3 cm)
– Weight: 1 lb. (0.45 kg)
– IP54 rating

VEHICLE INTEGRATION

IGNITION SENSE

– Power unit on / off with ignition & optional keep-on timer

OBD / BUS INTEGRATION

– ISO 15765-4 (CAN)
– ISO 15765
– ISO 11858 (raw CAN)
– SAE J1850 VPW (GM)
– SAE J1850PWM (Ford)
– SAE J1939 OBD protocol
– ISO 14230-4 (Keyword Protocol 2000)
– ISO 9141-2 (Asia, Europe, Chrysler)
– GMLAN single-wire CAN (GMW3089)
– Ford medium-speed CAN (MS CAN)

IO / PINS

– 2x digital IN (pull up, max 35v)
– 2x digital OUT (pull down)
– 1x analog IN
– 4x remote emergency switch with LED indicator
– 1x ignition sense
– 1x 1-Wire
– 1x RS-232

OTHER

– Internal speaker (basic tones)
– External speaker (waveform) (passive or powered)
– High-precision accelerometer
– Waypoint / action button

CONNECTIVITY

CELLULAR

– GSM (2G) bands: 850, 900, 1800, 1900 (quad band)
– UMTS (3G) bands: 800, 850, 900, 1900, 2100 (upon request)
– LTE CAT M1/NB1 bands: 2-5, 8, 12, 13, 20, 25, 28
– Built-in cellular antenna with optional external SMA
– User-accessible SIM

IRIDIUM SHORT BURST DATA® (SBD)

– External Iridium antenna with SMA connection

GPS

– Full GNSS support: Galileo, GLONASS, BeiDou
– 72-channel receiver
– 2.5m, 0.05m/s, 0.3 degrees accuracy
– Automatic spoofing & jamming protection
– Dedicated active GPS antenna with SMA connection

BLUETOOTH

– Bluetooth 5.0 LE (+8 dBm transmit power)
– Bluetooth beacon / sensor / RS-232 support

OPERATING PARAMETERS

ELECTRICAL

– External power: 10-32VDC (12 watts peak)
– Internal battery (user replaceable): 18650 Li-ON (PCB protected) (3.7v @ 3500mAh)
– Power consumption: ~5W charge; ~3.4W transmit; ~2W high-power run; ~0.4W (~1 year standby) low-power mode

ENVIRONMENTAL

– Operational temperature: -40°C to +85°C
– Operational temperature (on battery): -20°C to +60°C
– Charging temperature: 10°C to +45°C
– Storage temperature: -40°C to +50°C
– Operating humidity: ≤ 75% RH
– Storage humidity: ≤ 93% RH

HawkEye 5500 is a comprehensive vehicle management and two-way communications solution.

Software Features

REPORTING

- Customizable report rate while both stationary & moving
- Turn detection reporting

BLUETOOTH / COMMUNICATIONS PANEL

- Messaging / comms (text, digital forms, short codes, canned, raw)
- Alerts (geofence / speed violation)
- Automatic operator, passenger, & cargo identification using card
- Custom iOS / Android application
- Unit configuration & diagnostics

GEOFENCES

- Up to 75 geofences (polygon & circular)
- Audible tone when crossing boundary
- Advanced variable response geofences

UPDATE / UPGRADE / CONFIGURE

- Real-time remote configuration of all features & settings
- Upgrade firmware & perform remote diagnostics via Bluetooth or cellular

SECURITY

- Available AES-256 encryption of all MO / MT communication

EMERGENCY

- Activate with external switch or front panel button
- Interactive operator notification of emergency status
- Remotely activate / de-activate emergency mode

SMART EVENTS

- Up to 20 smart events (5 conditions & 2 outputs)
- Completely customize asset behavior based on real-time conditions

SPEEDING

- Remotely configurable speed limit
- Geofence-specific speed limit
- Configurable local audible tone

OBD / SENSOR / VEHICLE INTEGRATION

- Diagnostic Trouble Code (DTC) detection & clear
- Maintenance warnings (oil, life, etc.)
- Safety event detection (coolant temp, seat belts, doors, etc.)
- Driver behavior
- Bluetooth data offload

WAYPOINT / ACTION BUTTON

- Configurable on-demand position event

IDLING / MOVEMENT

- Excessive idling / fuel use detection
- Movement from stationary notification

ACCELEROMETER

- Crash detection
- Aggressive driving (harsh acceleration / braking)
- Rollover detection

About Blue Sky Network

Blue Sky Network is a leading provider of global solutions engineered for the future of land, sea, and air communications. Our comprehensive portfolio of satellite-based tracking systems, intelligent software solutions, and dual-mode two-way devices deliver seamless communications and connectivity, even in the most remote environments.

BLUE SKY NETWORK IS A PREFERRED IRIDIUM CERTUS® SERVICE PROVIDER AND VALUE-ADDED MANUFACTURING PARTNER.