

SureLinx™ 8100 D+/GPRS Integrated Wireless Controller

Product Overview

SkyWave's SureLinx™ 8100 is a dependable, fully-integrated D+/GPRS wireless controller. It sets the standard for reliable asset tracking and management systems at a low overall total cost. The SureLinx 8100 ensures that your applications are delivered with lowest cost message routing using GPRS when your assets are in cellular coverage, automatically switching to SkyWave D+ satellite service where necessary, maintaining a critical life-line link to your assets. Assets moving anywhere in the world are visible and reachable at all times by your business operations.

The SureLinx 8100 is a compact device with quad-band GPRS and SkyWave D+ satellite transceivers, GPS, discrete input/output feeds and a programmable controller. Program the device to report by time, distance, Geofence or any other criteria to meet your specific application needs. A single device and interface to both GPRS and D+ networks eliminates many additional components and integration issues, allowing you to build more robust solutions while saving time and money.

Applications

GPS reporting enables asset tracking for fleet management and security. With its low profile design, the SureLinx 8100 is compact and inconspicuous for covert installations. Combined with built-in alert capabilities, your assets will operate more efficiently and at lower risk. This means significant improvement to your bottom line.

Trucks and containers traveling across the country continually move in and out of cellular coverage—ships enter and leave port and the coastline, and in-land vessels follow rivers along borders and through valleys. But no matter where your assets travel, the SureLinx 8100 keeps you covered with SkyWave's global, seamless network services.

While in cellular coverage, your application can send frequent, cost-effective updates using GPRS. But while outside of cellular range, the SureLinx 8100 automatically switches to D+ 'exception mode', sending critical updates only when necessary.

The SureLinx 8100 works with SkyWave's unique Versa™ multi-protocol gateway to provide a single, easy-to-use interface to both GPRS and D+ networks so that your applications operate more efficiently. You can add new features more quickly, and get your applications up and running faster. A single point of contact with SkyWave for both GPRS and D+ networking means a high level of dependability, performance and satisfaction. You also achieve significant cost savings in the development and support of your applications.



Key Benefits

- Eliminates excess hardware component cost
- Fewer components increases reliability
- Reduces integration and support costs
- Simplifies application development and reduces time to market
- Reduces networking costs

Key Features

- Compact & inconspicuous
- Quad-band GSM/GPRS
- SkyWave D+ satellite
- Global roaming
- Least-cost message routing
- Optional message priorities
- Common exception reports
- GPRS-only long messages
- Exception-based reports
- Over-the-air programming
- Expandable inputs/outputs
- Geofence capability
- Optional data logger



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Technical Details

- Full API & development toolkit to program the SureLinx 8100
- Serial I/O via RS-232
- 20 Integrated I/O lines
 - Digital or analog
 - Wake-up enabled
 - Expandable
- From-terminal messaging
 - 10-byte payload (D+)
 - 200-byte payload (GPRS)
 - Poll, diagnostic, user data
- To-terminal messaging
 - 4 Alert codes plus up to 100-byte payload
 - Tone (4 alert codes)
 - Numeric (to 200 digits)
 - ASCII (to 133 char)
 - Transparent (1-100 bytes)

Product Specifications

Physical	Size	Transceiver: 155mm x 125mm x 51mm Satellite antenna: 127mm x 93mm x 23mm Transceiver: 244g; Satellite antenna: 166g
	Weight	
Environmental	Operating Temperature	Transceiver (In-cab): -30C to +65C Satellite & GPRS antennas: -40C to +70C
	Storage Temperature	-40C to +80C
	Humidity	95% Relative Humidity at 30C
	Dust & water ingress	Transceiver (In-cab): IP40/NEMA1 Satellite antenna: IP66/NEMA4X
	Vibration	5-20 Hz; 1.92 m2/s3 random noise 20-500 Hz; -3dB octave random noise
	Shock (survival)	Half sine 6ms, 300m/s2
	Electrical	Input Voltage Power Consumption (typ @ 12VDC) Mating Connector
Satellite	Frequency	9 VDC to 40 VDC Idle: 500µA GPRS mode: 1.9W; peak Tx 8W Satellite mode: Rx 1.4W; Tx 10W Transceiver I/O: JAE IL-AG5-30S-D3C1 Satellite Antenna: Fakra FAI-NARP-PCB-M GSM/GPRS Antenna: SMA female
	EIRP Elevation Angle GPS Accuracy	Rx: 1525.0 to 1559.0 MHz Tx: 1626.5 to 1660.5 MHz 9 dBW max 15 to 90 degrees 16 channels; 1575.42 MHz 3 m CEP; 5 m SEP
GSM/GPRS	Frequency GPRS data	850/1900/900/1800 MHz Class 12 multislot; Coding scheme 1 to 4 Class B mobile station; PBCCH support Class 4 (2W) for EGSM 850 and 900 Class 1 (1W) for GSM 1800 and 1900
	Output Power	
Certifications	Satellite Intrinsic safety Government	Certifications pending

Product	Application/Configuration Description	Ordering Code
SureLinx 8100	SureLinx 8100 D+/GPRS; GPS; side-mount 15 cm antenna cable	SM200235-GS0
	SureLinx 8100 D/GPRS ; GPS; side-mount 5 m antenna cable	SM200235-GS5
	SureLinx 8100 D+/GPRS; GPS; side-mount 10 m antenna cable	SM200235-GSA
Optional Data Logger Feature	Feature Option – Data Logger (5000+ messages)	F001
Satellite antenna extension cable	Satellite antenna extension cable, 10 m	**

** Contact SkyWave for details

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