GALAXY®

Sentinel: Auto-Deploy Solution

GALAXY® has selected the best core hardware partners in the world to ensure we provide the most durable field tested products available. **SKY**WARE systems and components are rugged and provide years of long lasting worry free connection to the **SKY**DATA network.

Sentinel, manufactured exclusively for GALAXY by General Dynamics Satcom™, *Model 98 and Model 120 (98cm. and 1.2m.)* **Auto Acquire Antenna** Terminals are ideally suited for economical, remote satellite communications. Applications include resource industry exploration, satellite **news gathering, disaster recovery, construction, search and rescue, business continuity, fire, police and first responder use**. The mobile VSAT terminals provide immediate Internet and Broadband access on the Galaxy **SKY**DATA satellite network.

Our system is delivered complete and ready for quick installation. Sentinel terminals can be **activated in minutes,** providing **fast, reliable** Ku-band communications anywhere. There are several option packages that assist your site requirements such as wireless routers, VoIP services and switch, integrated trailers and redundant back-up.

Key Features:

- High strength moulded Fiber Reinforced Polymer (FRP) reflector
- Rapid deployment
- Single push-button automatic satellite acquisition
- Automatic polarization alignment (HN modem)
- No special test equipment required
- System is easily installed using common cable materials
- Integrated with the Galaxy HUB, the system peaks based on direct feedback received from the HUB, not just a signal.

Galaxy Broadband
1.877.463.9728
galaxybroadband.ca
sales@galaxybroadband.ca

Galaxy Broadband
galaxybroadband
@galaxybroadband

25 YEARS AND BEYOND

Sentinel Specifications

Construction	.98M	1.2M
Mount	Az over El	Az over El
Reflector	Compression Molded FRP	Compression Molded FRP
Optics	Single Offset Prime Focus	Single Offset Prime Focus
Polarization	Feed Rotation	Feed Rotation
Physical Characteristics		
Antenna Weight	107 Pounds	138 Pounds
Stowed Dimensions	67.5" long x 39" side x 15" high (171cm L x 99 cm W x 38 cm H)	84" long x 48.5" wide x 16.5" high 213 cm L x 123 cm W x 42 cm H)
Deployed Height	62" Max (157 cm)	75" Max (191 cm)
Az Travel	430º (± 215º)	430º (± 215º)
El Drive System	Actuator	Actuator
Poi Drive System	Motor Drive	Motor Drive
Offset Correction	Yes	Yes
Deployment Compass	Yes	Yes
Sensor Tilt	Yes	Yes
Model 7000 Indoor Controller Dimensions	7" wide x 1.75" high x 7.25" deep (17.8 cm W x 4.4 cm H x 18.4 cm D)	7" wide x 1.75" high x 7.25" deep (17.8 cm W x 4.4 cm H x 18.4 cm D)
RF Specifications		
TX Frequency	13.75 - 14.5 GHz	13.75 - 14.5 GHz
RX Frequency	10.95 - 12.75 GHz	10.95 - 12.75 GHz
TX Gain	41.3 dBi	43.2 dBi
RX Gain	39.8 dBi	41.7 dBi
Polarization	Horiz. Or Vert.	Horiz. Or Vert.
Cross Pol Isolation within BPE	-30/0 dB Max	-30.0 dB Max
(Optional Mode Match Feed)	-35.0 dB Max	-35.0 dB Max
Any Angle off axis	-25.0 dB Max	-25.0 dB Max
Sidelobe Envelope, Co-Pol (dBi)		
1º ≤ q ≤ 20º	29-25 Log q dBi	29-25 Log q dBi
20º < q < 26.3º	-3.5 dBi	-3.5 dBi
26.3º < q ≤ 48º	32-25 Log q dBi	32-25 Log q dBi
48º < q	-10 dBi (averaged)	-10 dBi (averaged)
RX Port Interface	WR-75	WR-75
TX Port Interface	WR-75	WR-75
RX L-Band Interface	RG-6	RG-6
TX L-Band Interface	RG-6	RG-6
Approvals	TBD	TBD
Model 7000 Controller		
Front Panel User Interface	Push Button Operation	Push Button Operation
GUI Interface	Via User Laptop	Via User Laptop
Connections	Ethernet	Ethernet
Electrical Characteristics		
Input Voltage	12 VDC (120VAC optional)	12 VDC (120VAC optional)
Power Consumption (Max)	250W max.	250W max.
Power Supply	110/220 VAC	110/220 VAC
Cabling		
TX	RG-6	RG-6
RX	RG-6	RG-6
Communication	RG-6	RG-6
Max Cable Length, Indoor - Outdoor	100 ft. (30.48 m)	100 ft (30.48 m)
Environmental		
Operational Wind Speed	40 mph w/0.25 dB max. loss @Ku-band (67 km/h)	35 mph w/0.25 dB max. loss @Ku-band (67 km/h)
Operational Wind Speed to Stow	50 mph (83 km/h)	50 mph (83 km/h)
Operational Temperature	-40º F to 140º F (-40º C to 60º C)	-40º F to 140º F (-40º C to 60º C)
Storage Temperature	-50º F to 160º F (-46º C to 71º C)	-50º F to 160º F (-46º C to 71º C)
Operational Elevation	70º Max. Look Angle	70º Max. Look Angle
Modem Interface	Via Ethernet	Via Ethernet
Mount Options	Vehicle, Trailer or Ground Mount	Vehicle, Trailer or Ground Mount
Transit Cases	Optional	Optional