INSTRUMENT LANDING SYSTEM

Developed in cooperation with the FAA and certified for Category I, II and III operation, the Series 2100 Instrument Landing System (ILS) exceeds industry standards for reliability and performance, and is the ILS of choice of the United States Air Force.

PRODUCT OVERVIEW

The Series 2100 Instrument Landing System (ILS) provides Category I, II and III performance in the most versatile and technically advanced system in the industry today. Available in multiple configurations and with a wide variety of antenna arrays, the 2100 is field upgradeable from Category I to Categories II and III to meet changing operating conditions.

The 2100 provides user-friendly Windows™ based interface, integrates the latest technical features and reduces system component content.

The 2100 combines ease-of-operation and maintenance with increased performance and significantly reduced installation, maintenance and logistics costs, with software designed and qualified to rigorous RTCA DO-178 Level B/278 standards.

Additional features include:
- Dual and single equipment configurations
- Dual and single frequency configurations
- 8, 14, 16, and 20 element LPD antenna arrays
- Null reference, capture effect, sideband reference and end-fire glide slope configurations
- Comprehensive RMM and PMDT (Portable Maintenance Data Terminal)
  - Remote certification/control
  - Automatic fault diagnostics
  - Monitoring and recording
- Seamless Category I - III upgradeability
- ILS equipment is U.S. Federal Aviation Administration certified, meets or exceeds ICAO Annex 10 recommendations and has been commissioned in hundreds of locations worldwide.
LOCALIZER SPECIFICATION

**Mechanical**
- Weight - cabinet: 193lbs (87.5kg)
- Dimensions - cabinet (W x D x H): 24" x 24" x 24" (61cm x 61cm x 61cm)

**Environmental**
- Temperature
  - Indoor equipment: -10°C to +55°C
  - Outdoor: -50°C to +70°C
- Relative humidity
  - Indoor equipment up to 90% noncondensing.
  - Outdoor equipment up to 100%
- Altitude: 0 to 4573m (0 to 15,000 ft) MSL
- Duty cycle: Continuous, unattended
- Wind: Up to 100mph (161km/hr), with 0.5" (12.7mm) ice

**Electrical**
- Primary power: 90-264V AC ±15%, 47-63Hz
- Standby power: 24V DC no-break battery back-up system, minimum 6 hr. operation
- Frequency stability: ±0.0005%
- Power output: 20W maximum (adjustable)
- Frequency range: 108 - 111.975MHz
- Frequency control: Synthesizer
- Modulation tones: 90/150Hz navigation, 1020Hz identification
- Coverage: Per ICAO Annex 10
- Equipment: BITE with fault diagnostics to LRU capable of being performed from a remote location
- Monitors: Dual parallel AND/OR configuration, monitors standby transmitter and built-in test generator for monitor certification
- RMM: Comprehensive, includes alarms and maintenance alerts with automatic dial out to any telephone number

**Antennas**
- Configurations: 8, 14, 16 or 20 element antenna array with integral monitoring and optional near and far field monitoring

GLIDESLOPE SPECIFICATION

**Mechanical**
- Weight - cabinet: 193lbs (87.5kg)
- Dimensions - cabinet (W x D x H): 24" x 24" x 24" (61cm x 61cm x 61cm)

**Environmental**
- Temperature
  - Indoor equipment: -10°C to +55°C
  - Outdoor: -50°C to +70°C
- Relative humidity
  - Indoor equipment up to 95% noncondensing.
  - Outdoor equipment up to 100%
- Altitude: 0 to 4573m (0 to 15,000 ft) MSL
- Duty cycle: Continuous, unattended
- Wind: Up to 100mph (161km/hr)

**Electrical**
- Primary power: 90-264V AC ±15%, 47-63Hz
- Standby power: 24V DC no-break battery back-up system, minimum 6 hr. operation
- Frequency stability: ±0.0005%
- Power output: 5W maximum (adjustable)
- Frequency range: 328.6 - 335.4MHz
- Frequency control: Synthesizer
- Modulation tones: 90/150Hz navigation
- Glide angle: 2 to 4 degrees
- Coverage: Per ICAO Annex 10
- Equipment: BITE with fault diagnostics to LRU capable of being performed from a remote location
- Monitors: Dual parallel AND/OR configuration, monitors standby transmitter and built-in test generator for monitor certification
- RMM: Comprehensive, includes alarms and maintenance alerts with automatic dial out to any telephone number

**Antennas**
- Configurations: Null-Reference, Side-Band Reference, Capture-Effect (M-array), and Non-Imaging (Watts End Fire)

MARKER BEACON SPECIFICATION

**Mechanical**
- Weight - cabinet: 50lbs (22.7kg)
- Dimensions - cabinet (W x D x H): 21.25 x 10" x 28.25" (54cm x 25.4cm x 71.8cm)

**Environmental**
- Temperature: -50°C to +70°C
- Relative humidity: 0 to 100%
- Altitude: 0 to 4573m (0 to 15,000 ft) MSL
- Duty cycle: Continuous, unattended
- Wind: Up to 100mph (161km/hr)

**Electrical**
- Primary power: 120-240V AC ±15%, 47-63Hz
- Standby power: 12V DC no-break battery back-up system
- Operating frequency: 75MHz
- Frequency stability: ±0.0005%
- Power output: 2.5W maximum (adjustable)
- Built-in measuring equipment
  - Audio Frequency Counter, Digital Voltmeter, Transmitter power meter, VSWR meter
- RMM: Comprehensive data to include alarms.
- Modulation capability: 0% to 97% adjustable
- Polarization: Horizontal
- Keying for:
  - Outer Marker
  - Middle Marker
  - Inner Marker
  - Fan Marker
- Coverage: Per ICAO Annex 10