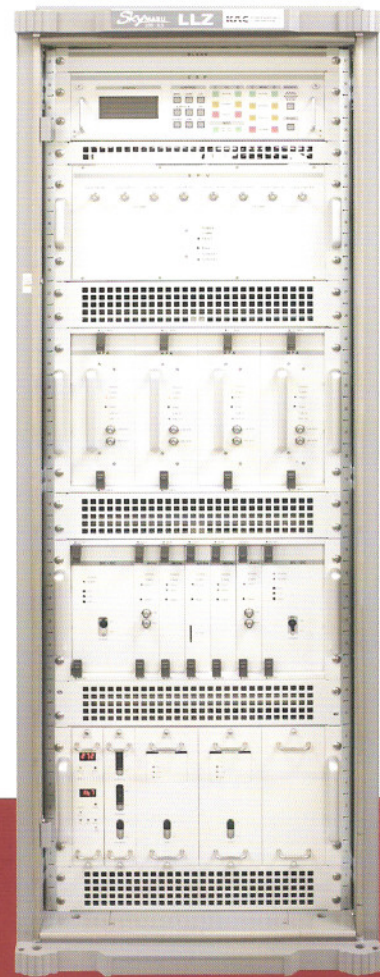


Brief Description

LLZ of KAC made based on flexible modular concept. This means that this system adapted modern digital technology. Also we use to high speed micro processing & integrated Circuit device. KAC has many experiences about maintenance field. So KAC know well this system so we made it in 2008. Also, we are leaders in the design and implementation of all NAVAIDS system field and ultramodern technology. Finally, this system is fully compliant with ICAO Annex 10 & also FAA Order.

SkyMARU 100-ILS Instrument Landing System



LLZ

Localizer

Graphic User Interface

- All Control through LMMS & RMMS
- All Monitoring through LMMS & RMMS
- Stable Control & Monitoring (Based on M/S Windows)

High Speed Digital Control

- 32bit Microprocessor
- FPGA Based Digital Circuitry
- All 16bit A/D & D/A Control

RF Path Stability

- All Solid Metal Shield
- Stable RF Signal Generation (By DDS Method)
- Unmatched Performance
- High Quality Signal Linearity

Antenna System

- High Gain, Performance & Easy Maintenance
- Easy Physical collocation with any DME
- Easy Installation
- High Quality Signal Linearity

Power Supply System

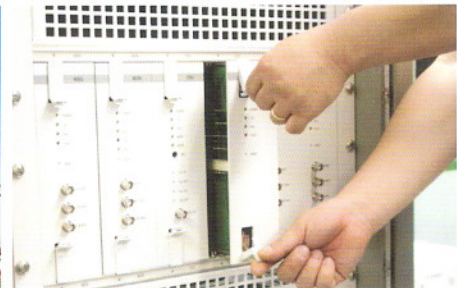
- Dual Redundant Power System
- Very High Efficiency
- All Unit Plug-In Type
- Booster Up(Voltage from BAT)

Easy Maintenance

- Hot-Swap Control
- No Tuning or Adjustment for Card and Module Replacement
- Single RACK for All Card & Module Configuration

Reliability

- Above MTBF 20,000 Hr
- Fully Compliant with ICAO Annex 10 & FAA Order
- Successfully Passed Flight Inspection



LLZ

Technical Specifications

Frequency

Type	Two Frequency
Range	108MHz to 112MHz, 50KHz Spacing
Stability	±0.001%
DDS Syn MOD	Fc±4KHz(Difference Frequency between Course & Clearance)

Output Power

For CSB Course	MAX 20W It can be adjusted by GUI to linear value
For SBO Course	MAX 1W It can be adjusted by GUI to linear value
For CSB Clearance	MAX 20W It can be adjusted by GUI to linear value
For SBO Clearance	MAX 1W It can be adjusted by GUI to linear value
Harmonic radiation	0.25uW Max
Spurious	0.25uW Max
Stability	±0.2dB(At the operating frequency)

Modulator

Type	DDS syn.
Depth of 90Hz/150Hz	20%(Each tone)
Adjustable Range	Full Range(Each tone)by CSP or LMMS, RMMS
Mod Stability	±0.1% at the operating system
SDM Stability	±0.25% at the operating system
DDM Stability	±0.1% at the operating system
Tolerance	±0.01% at the operating system
Harmonic Distortion	1% Max(Total)
Phase Control	1° Max(Between 90Hz and 150Hz, In here 150Hz is ref.)
Phase adjustable range	Full range(In here, CSB is ref.)

Identification

Frequency	1,020Hz±50Hz
Modulation Depth	15% Max. 10% Normal. Full range adjustable by CSP or LMMS, RMMS
Number of letter	5 letters Max.

Monitoring

System change time	1sec Max.(refer to ICAO Annex 10 CAT III-c)
Configuration of monitoring system	Integral(BITE), Near Field and Far Field
Monitoring ITEM (hot and cool stand-by monitoring)	DDM, SDM, Frequency Difference, Identification, DC voltage and Main power, RF level, Center line alarm, Displacement Sensitivity alarm, Each Monitor Ant operation alarm
Alarm Time Delay	0.5sec to 10sec, Adjustable step is 0.1sec.
Receiver dynamic range	-5dBm to -35dBm, In here output power is fixed by AGC circuit in MON unit that It is processed by DSP device.

Control Function

PC LMMS(Desk Top)	OS : Base on Windows XP CPU : Core 2 duo RAM : 2G, HDD: 250GB or higher Graphic Card : Geforce 8400 over
PC RMMS(Note Book)	OS : Base on Windows XP CPU : Core 2 duo RAM : 2G, HDD: 120GB or higher
GUI program	Based on Windows XP (designed program by Visual C++ or equal higher)
Communication Line Item	RS-232, RS-485 or TCP/IP(In this case, It can be Recommended from Manufacture) Password access and level access System No.1 and No.2 on/off, TX No.1 and No.2 on/off, Transfer and Shutdown Reset, Alarm Bypass No.1 and No.2/normal, buzzer stop on/off System operating parameter and etc.