NORMARC 7000B

Instrument Landing System

NORMARC 7000 ILS systems are available in a wide range of configurations all meeting the most stringent ICAO Level 4 requirements and designed to be cost-effective, easy to install and operate, and above all, dependable.

NORMARC 7000 INSTRUMENT LANDING SYSTEM (ILS)	LOCALIZER	GLIDE PATH
SYSTEM		
Coverage – course – clearance	25NM/±10° 17NM/±35°	10NM/±8° azimuth
Course width	2° to 6° adjustable	± 0.24 x glide path angle
Glide path angle	–	2° to 4° adjustable
Course stability	< ± 1m (typical)	< ± 0.04°
TRANSMITTER		
Frequency range	108 to 112 MHz	328.6 to 335.4 MHz
Frequency tolerance	± 0.0004%	± 0.0004%
Output power CSB (Course and Clearance)	5 - 25W adjustable (Course/Clearance)	3 - 8W adjustable (Course) 0.3 - 1W adjustable (Clearance)
Modulation depth 90/150 Hz nominal	20%	40%
Adjustable range (each tone)		10-25% 10-44%
Frequency tolerance (90/150 Hz)	± 0.01%	± 0.01%
Total harmonic distortion (90/150 Hz)	1% maximum	1% maximum
Phase locking (90 Hz to 150 Hz)	5° maximum ref 150 Hz	5° maximum ref 150 Hz
CSB/SBO adjustment range		360° 360°
IDENTITY KEYER		
Modulation Frequency	1020 Hz ± 0.5 Hz	
Modulation depth	5 - 15% adjustable	
Built- in interface for DME co-location, ILS can be ident master or slave		
MONITORING		
Alarm parameter (selectable)	Integral course line Integral displacement sensitivity Near- field course line Integral clearance (two frequency only) Identity	Integral Glide path angle Integral displacement sensitivity Near field Glide path angle Integral clearance (two frequency only)
Total period of radiation out of tolerance	1 to 10 seconds	1 to 6 seconds
Additional near- field time delay	0 to 20 seconds	0 to 20 seconds

NORMARC 7000B

Instrument Landing System

NORMARC 7000 INSTRUMENT LANDING SYSTEM (ILS)

REMOTE MAINTENANCE MONITORING

3 x RS232 interface for connection to modem/PC
Event log, alarm log, self diagnostic, historical data, fully electronically controlled TX and all functions needed during flight check from one window

MARKER BEACON

According to ICAO Annex 10 paragraphs 3.1.7 and 3.6

REMOTE CONTROL

Data transmission medium	2-wire line, 600 ohm, FSK or RS232

ENVIRONMENTAL CHARACTERISTICS

Operational temperature	
Indoor	- 10 to + 55°C
Outdoor	- 40 to + 70°C
Storage temperature	- 30 to + 60°C
Wind	Up to 200 km/h
Ice	50 mm maximum
Non-destructive hall size	Up to 15 mm (diameter)

LOCALIZER ANTENNA SYSTEMS

	NORMARC 3523B	NORMARC 7212	NORMARC 3525	NORMARC 7216	NORMARC 7220
	Single-frequency	Two-frequency	Two-frequency	Two-frequency	Two-frequency
Number of elements	12	12	24	16	20
Width of Array	37m	26m	48m	38m	52m
Beam-width CSB (-3 dB)	±3.8°	±3.6°	±2.0°	±2.5°	±2.0°

GLIDE PATH ANTENNA SYSTEMS

Antenna System	Sideband Ref., M-array, 0-Ref.
Frequency band	328 - 336 MHz
Glide path angle	2.0° to 4.0°
Antenna element	Stacked dipoles with reflector
Gain	12.5 dBi
Beamwidth	Horizontal +/- 12.5°
Front-to-back ratio	Min. 17 dB
Antenna mast	Self-supporting steel construction
Height	7 - 18m

indra

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