



TEL/FAX: (506) 2443-1648
AFS: MROCYOYX
Web Page: www.dgac.go.cr
e-mail: aiscr@dgac.go.cr

REPUBLIC OF COSTA RICA
GENERAL DIRECTION OF CIVIL AVIATION
Air Navigation Services Department
Aeronautical Information Unit
P.O. BOX 5026 -1000
SAN JOSE – COSTA RICA

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GENERAL TECHNICAL CHARACTERISTICS DVOR TIO
JUAN SANTAMARÍA INTERNATIONAL AIRPORT

The General Directorate of Civil Aviation, in coordination with COCESNA, informs the aircraft operators, ground service companies and other users of the Juan Santamaria International Airport; of the technical specifications, with which air navigation the DVOR TIO provides services.

General technical characteristics DVOR / DME TIO	
<i>Coordinates</i>	09°59'01.21"N 084°14'10.17"W
<i>Elevation of the site</i>	856.61 msnm
<i>Magnetic variation</i>	1.75° (year 2018)
<i>Sense of Magnetic Variation</i>	West
<i>Equipment configuration</i>	Double
<i>Height of the opposite antenna</i>	3 meters



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General technical characteristics DVOR TIO	
<i>Frequency</i>	115.7 MHz
<i>Call ID</i>	TIO
<i>Model</i>	THALES 432 SB48
<i>Type</i>	Doppler
<i>Nominal power</i>	100 W
<i>Polarization</i>	Horizontal
<i>Impedance</i>	50 Ohms
<i>Modulation frequency</i>	30 Hz +/- 0.01%
<i>Depth of modulation amplitude</i>	30%
<i>ID Frequency</i>	1020 Hz
<i>Voice frequency range</i>	300 to 3000 Hz
<i>Azimuth stability</i>	Azimuth better than +/- 0.5 degrees
<i>Azimuth accuracy</i>	Azimuth better than +/- 1 degrees, on a terrain of 3 degrees elevation 300 meters away
<i>VSWR</i>	1.0:1



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General technical characteristics DME TIO	
<i>Response frequency</i>	1191 MHz
<i>Interrogation frequency</i>	1128 MHz
<i>Channel</i>	104 X
<i>Model</i>	THALES DME 435
<i>Type</i>	1 KW Dual
<i>ID Call</i>	TIO
<i>Nominal power</i>	1 KW
<i>Question pulse</i>	12 microseconds
<i>Response delay</i>	50 microseconds
<i>MTBO</i>	81235 hrs
<i>MTBF</i>	6647 hrs
<i>Frequency stability</i>	0.0010%
<i>Polarization</i>	Vertical
<i>Coverage</i>	±0.12 NM +0.05% of distance less than 65 NM ±0.17 NM +0.05% of distance greater than 65 NM