

HISPAMAR-LINK BUDGET

DIGITAL SERVICES

TRANSPONDER N°

SATELLITE

AMAZONAS-3

GENERAL DATA

Transponder bandwidth(MHz)	450
bandwidth (MHz)	45
carrier type	DVB-S2
Modulation	8PSK
Information rate (Kb/s)	70687.5
FEC	2/3
bandwidth occupied (KHz)	45000.00
BER (Tasa de errores)	-
Eb/No (dB)	5.0
LINEALIZADOR (0=NO, 1=SI)	si
N° of carriers	10.00
ISO total (dB)	3.0
OBSO total (dB)	2.5
C/I intermodulation	23.0
Occupation factor	1.20
availability (%)	clear sky
satellite longitude	-61

UPLINK

Clear Sky

Continent E/T Rx

Country E/T Rx

Name E/T Tx

E/T Tx (degrees E) Longitude

E/T Tx (degrees N) latitude

E/T Tx (m) Altitude

Uplink Frequency (GHz)

EIRP E/T Tx.(dBW)

Automatic Power Control

E/T Tx example

HPA (W)

HPA-antenna (dB) loss

Ant. gain (dB)

Ant. Diameter (m)

Polarization discrim. (dB)

Accuracy polarization(*)

% unavailability

Rain atten.

Atmosp. Atten. loss (dB)

aiming error loss (dB)

sky loss (dB)

D.F.P. (dBW/m2)

saturation D.F.P.in the center (dBW/m2)

Back-off Input (dB)

Geogr. advantage (dB)

G/T satellite in the contour (dB/K)

C/N up (dB)

C/I aggregate co-polar cross-polar up(dB)

C/I aggregate co-polar cochannel up(dB)

C/(N+I) without other interf. satellites up (dB)

p.d Interference from satellite 2*(dBW/Hz)

C/I with other interf. Satellites 2° up (dB)

c/(N+I) with other interf. Satellites up (dB)

DOWNLINK

Clear sky

Continent E/T Rx

Country E/T Rx

Name E/T Tx

E/T Rx (degrees E) Longitude

E/T Rx (degrees N) Latitude

E/T Rx (Km) Altitude

Down Frequency (GHz)

ERP satellite in the beam center (dBW)

Back-off output (dB)

Geogr. advantage (dB)

% unavailability

Rain Atten.

Atmosp. Atten. loss (dB)

aiming error loss (dB)

sky loss (dB)

G/T E/T Rx. (dB/K)

E/T Rx Example

Ant. Gain(dB)

antenna-receptor loss(dB)

Tba (°K)

Ta (°K)

Tstst. (°K)

Ant. Diameter (m)

Polarization discrim.(dB)

C/N down (dB)

C/I aggregate co-polar cross-polar down(dB)

C/I aggregate co-polar cochannel down(dB)

C/I channel adjacent (dB)

C/(N+I) without other interf. satellites down) (dB)

desp Interference from satellite 2*(dBW/Hz)

C/I with other interf. Satellites 2° down (dB)

c/(N+I) with other interf. Satellites down (dB)

GLOBAL RESULTS

Clear sky

C/(N+I) without other interf. satellites TOTAL) (dB)

C/(N+I) with other interf. satellites) Total (dB)

Eb/No available (interf nominal)(dB)

Eb/No request (dB)

Margin (nominal)(dB)