



MONITORING SYSTEM FOR DVB-C NETWORKS TO ANALYZE AND ENSURE THE QUALITY OF THE NETWORK





RF ANALYSIS

- O Real Time spectrum
- O Two ways of operation: channel analysis or multiple channel polling
- O Signal quality measurements: Power, C/N, MER, BER
- Alarm log (real time) and representation (time evolution)

TS ANALYSIS

O Bitrate analysis
 O Level1, 2 priority error analysis as TR 101 290 recommendations
 O Table repetition and quality analysis
 O Services treeview

AND MUCH MORE...

O Video thumbnails
O 1 RF input, 1 ASI input, 1 ASI output, and HDMI audio/video output
O Ethernet connectivity
O Full historial measurements with alarm analysis
O HTML5 control application
O SNMP v2.0 alarms

OPTIONAL FEATURES

✓ IP (TSoIP) INPUT with VLAN and IGMP support

GSERTEL

- ✓ Redundant IP INPUT
- ✓ Advanced Measurements
- (Full Spectrum, Constellation)
- ✓ Extended TS Analysis
- (Level 3 priority errors, PCR Jitter)
- ✓ TS Recording
- (Manual and alarm triggered)
- ✓ Live Streaming
- ✓ PID monitoring
- ✓ Bit rate monitoring

RCS1

ADVANCED REMOTE MONITORING SYSTEM FOR DVB-C



MANAGEMENT SYSTEM



ALL IN ONE

Shows an overview of the channel status on one screen. It shows spectrum, services, measurements, alarms, Pids. All integrated in a single view for quick analysis



FULL SPECTRUM (OPT.)

Represents realtime spectrum of the monitorized channel with detailed measurements, mask, max. and min. hold features

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Standards

Inputs RF Input Frequency: 47MHz to 1GHz IP: 2 x GE RJ45 (TSoIP) (opt.)

Outputs TS: 1 x ASI OUT BNC 75Ω

	RF Measurements
	20 MHz Spectrum
	Power, C/N
	MER
	Pre-BER (Annex B) and Post-BER (Annex B)
_	Constellationn (opt.)
_	Full Spectrum (opt.)
_	MPEG Measuremenst
_	Level 1,2 y 3 priority errors (level 3 opt.) TR 101 2
_	Alarms log analysis

22 482MHz	55.9 🥪	31.2 🥪	24.3 (1)	1.05-3	<1.05-8	· ·	11
23 490MHz	47.2 (1)	20.1	20.3 😦	9.70-3	4.55-7 🥪		1
24 498MHz	25.1	7.2					
25 506MHz	24.7	8.10				1 · · · · · · · · · · · · · · · · · · ·	
26 514MHz	23.6	6.98					
27 522MHz	35.0	14.6	<16.0	9.75-2	>1.05-3		
28 530MHz	32.9	7.6	<16.0	7.36-2	>1.05-3	lliulle	-1
29 538MHz	23.7	5.98					-
30 546MHz	20.7	4.7				0 2 2 2 2 3 3 3 7 3 3 2 1 3 3 2 1 3 3 3 3 3 3 3 3 3 3 3 3	0
31 554MHz	17.5	1.40				Alarms	
32 562MHz	18.9	1.3				RF Error 37 🔴 TS Error Pri#1 0 🌔 TS Error Pri#2 0 🌑 TS Error Pri#3 0	•
33	21.3	3.4				Show Alarma: A A A 16 Prist Prist Of Pr Pr Num TimeSama D Nume Description Unit Walar	-1
570MHz	-	-				40 16 2014-10-06 15 0604 41A5 Chitoslaw Chitoslaw 24.0 48 223 48	-1
34 578MHz	25.9	8.7				40 🔤 🛕 3 2014-10-06 15:06:01 42A2 Channel Unlock Channel RF1 626:000 MHz is Unlocked!	-
35 586MHz	22.1 😦	4.50			_8	40 🔤 🔔 9 2014-10-06 15.06:00 41A4 CBER too low CBER too low <1.0E-6 <1.0E-6	-
36 594MHz	23.5	5.4				40 🖾 🙏 7 2014-10-06 15.06:00 41A3 MER too low MER too low 20.4 dB < 16.0 dB	-
37 602MHz	28.2	10.2 😠	-8			40 🔯 🌲 2 2014-10-05 15:05:58 42A1 Channel Lock Channel RF1 626:000 MHz is Locked	
38 610MHz	43.6	25.2	19.3 😦	1.55-2	2.766		
POL Contir			easu	ring	ofan	n user-defined number of channels	

nER C/N MER uV) (dtt) (dtt)

SHREE	RC5100	_			_		21-05-2015 14	52:11 edmin 🖉 🐖	
	ea) • D/311							RF 1 (C) (2)	AR 1
	E In One	TS Analysis	Channel An	lysis Spectrum Analysi		Polling	Alarms	14	torical
			View				Configuration		
			Historical			Filter By Level:			
R too low			PESCORICAN			Filter by Type:			LI PILL P
									A PAGE P
						Filter By ID:		14	
						Show Last:			Last 5 min
						Reset Alarms:			Re
11212410	2010/09/2114-47:10				2010/05/2114/02/10				
if Ferrar		282	TS Error Pri#1	Alarm List	or Prist2		76 🔴 TS Error Prist3		154
0-FUIL		282	13 Error Phan	0 🚺 15 6/	OF PERMIT		76 TS BITOR PRIXS		154
Priority	TimeStamp	10	Narre			Description		Linit	Value
🖾 🔔 🗌	2015-05-21 14:52:10	41A4	CBER too low	CBER too low				5.0E-6	1.46-4
22 🔔	2015-05-21 14:52:10	23A1	PCR error	Time interval between I	two consecutive PC	R of PID 0x7D1 (Redio Ne	cional Galicia) out of limits	40.0 ms	40.3 ms
	2015-05-21 14:52:10	32A3	Si repetition	CAT Time interval is hig	her than limit			500.000 ms	500.033 ms
D 🔔 👘	2015-05-21 14:52:08	41A4	CBER too low	CBER too low				5.0E-6	1.4E-4
	2015-05-21 14:52:07	32A3	Si repetition	CAT Time interval is hig	her than limit			500.000 ms	501.015 ms
D 🔔 🗌	2015-05-21 14:52:06	41A4	CBER too low	CBER too low				5.0E-6	1.5E-4
A 🗆	2015-05-21 14:52:04	41A4	CBER too low	CBER too low				5.06-5	1.96-4
00.0	2015-05-21 14:52:04	2361	PCR error	Time interval between i	we consecutive PC	R of PID 0x7D1 (Redio Na	cional Galicia) out of limits	40.0 ms	41.1 ms

ALARMS

Represents the alarms counter during an user-selected period of time

IP flow measurements (opt.)
Packet arrival max. & min
IP & UDP payload bitrate
Media loss rate
Loss IP frames
Corrected IP frames
Mechanical characteristics

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Size: 482mm W x 348mm D x 41mm H Working temperature: 0 a 40 °

Electrical Characteristics

Input 100 - 240 VAC 50-60Hz 1.4A Interfaces 1 x USB 2.

1 x Ethernet RJ45 LCD Graphic display HDMI

Control protocols

