

RCS Monitoring Family

HIGHEST PERFORMANCE REAL TIME MONITORING SYSTEM
FOR ATSC 3.0 AND ATSC 1.0 NETWORKS

ATSC 3.0
ATSC 1.0



TWO PROBES TO COVER ALL NEEDS:

RCS100 1xRF input, 1xASI input, 1xASI output

RCS400 4xRF input, 4xASI input, 2xASI output

PROFESSIONAL MONITORING:

RF ANALYSIS

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

CONTENT ANALYSIS

- ATSC3.0 and ATSC1.0 Analysis
- Service Bitrate
- Table Bitrate
- Level1, 2 priority error analysis for ATSC1.0 as TR 101 290 recommendations
- Services treeview
- LLS Tables for ATSC3.0
- PSI/SI Tables for ATSC1.0
- STLTP Analysis for IP input
- TXID for ATSC3.0

AND MUCH MORE...

- Video thumbnails
- Ethernet connectivity
- Full historical measurements with alarm analysis
- 1 PPS & 10 MHz synchronization inputs
- HTML5 control application
- SNMP v2c alarms

OPTIONAL FEATURES

- ✓ IP INPUT with VLAN and IGMP support
- ✓ Redundant IP INPUT
- ✓ Advanced Measurements
(Full Spectrum, Constellation, SFN Drift, frequency offset)
- ✓ Extended Content Analysis
- ✓ TS Recording for ATSC1.0
- ✓ PCAP Recording for ATSC3.0
- ✓ Live Streaming using HLS
(the RCS works as HLS server)
- ✓ Services Audio Levels metering

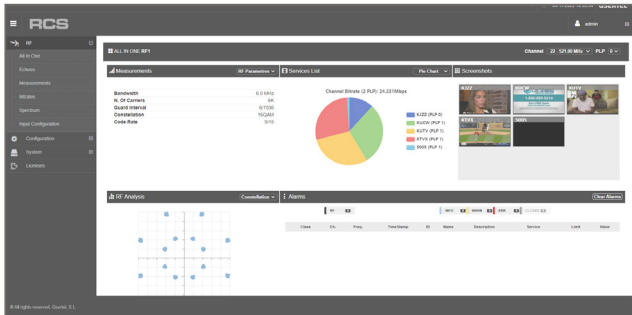
GSERTEL

RCS family

ADVANCED REMOTE MONITORING SYSTEM
FOR ATSC 3.0 AND ATSC 1.0

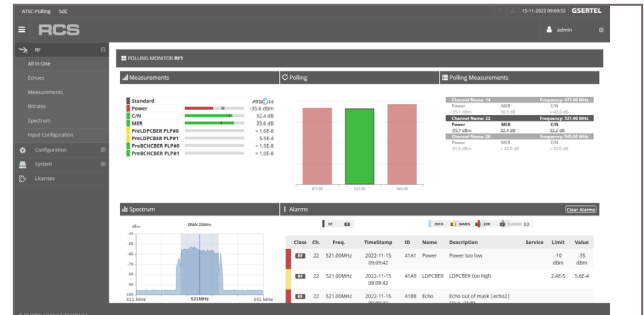


MANAGEMENT SYSTEM



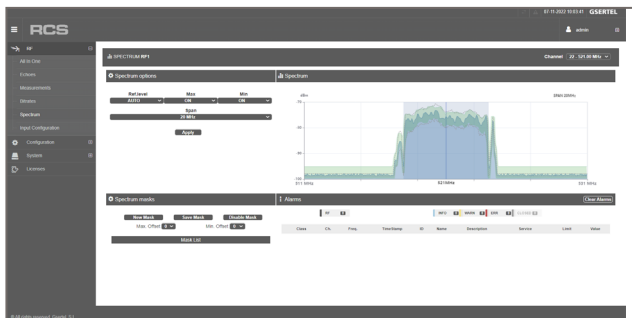
ALL IN ONE

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



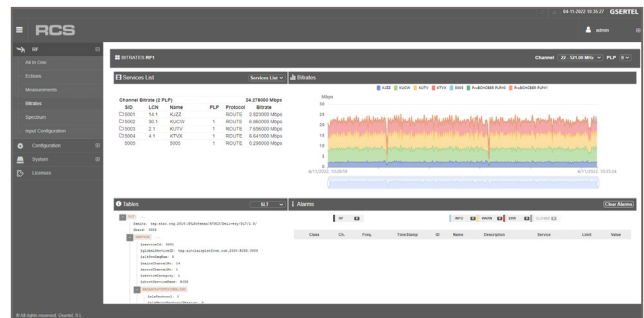
POLLING

Round-robin measuring of an user-defined number of channels



FULL SPECTRUM (OPT.)

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



BITRATES

Allows us to see in detail the bitrate value for the selected channel, as well as all the services bitrates of all the PLPs of the channel

SPECIFICATIONS

Standards

A/300 (ATSC 3.0)
A/53 (ATSC 1.0)

Inputs

RF: 1 x 50 Ω N connector
(return loss>14dB)
RF Input Frequency:
47MHz to 1GHz
SYNC: 1 x 1PPS BNC 50 Ω
10MHz BNC 50 Ω
TS: 1 x ASI IN BNC 75Ω.
IP: 2 x GE RJ45 (opt.)

Outputs

TS: 1 x ASI OUT BNC 75Ω
A/V: 1 x HDMI

RF Measurements

20 MHz Spectrum
Power, C/N, Shoulders
MER, PreBER, PostBER (ATSC1.0)
MER, PreLDPCBER, PreBCHBER (ATSC3.0)
Accuracy:±2dB
Resolution 0.1dB
Polling feature
Frequency Offset (opt.)
Constellation (opt.)
Echoes
Full Spectrum (opt.)

MPEG Measurements

Level 1,2 & 3 priority errors (level 3 opt.) for ATSC1.0
TR 101 290
Service Bitrate
Table Bitrate
Alarms log analysis
SFN Drift for ATSC3.0 (opt.)
Loudness metering (EBU Tech Doc 3341) (opt.)
System and LLS tables (ATSC3.0)
PSI/SI tables (ATSC1.0)

STLTP Measurements

IP Bitrate
Max. and Min Inter-Packet time
Sequence Errors/s
Sequence Valid/s
UDP valid/s
SFN Network Delay

Electrical Characteristics

Input 100 - 240 VAC 50-60Hz 1,4A

Mechanical characteristics

1U 19" rackable unit
Size: 482mm W x 348mm D x 41mm H
Working temperature: 0 a 40 °C
Storage temperature.: 0 a 50 °C

Interfaces

1 x USB 2.0
1 x Ethernet RJ45
LCD Graphic display
HDMI

Control protocols

HTML and SNMP

V.0.3

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