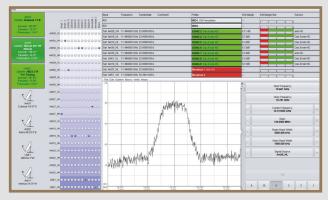


# **HMCS – Hiltron Monitoring and Control System Universal Solution for Applications**

HMCS is a *modular* and *scalable Monitoring* & *Control system*. It is *designed* to control all *relevant* Satellite equipment in a Master Control Room, as well as the *complete uplink* of an *SNG application*. The application is *focused* on a *user-friendly handling* of *different equipment* for operators and offers a *SNMP interface* to a *high-level system*.



Example for Receive Station

### **FEATURES**

- All relevant information at one glance.
- Management of different Encoder, Modulator and HPAs.
- Interfaces to higher-level systems (SNMP, XML).
- Management of Tx and Rx chains including redundancy switching.
- Uniform management of different equipment same type (e.g. receivers with different versions).

- Selection and storage of different Satellite Selection of different sources via matrix. parameters (satellite position, beacon frequency, transponder/slots etc.) database supported.
- Database supported profiles for satellite reception (IRD settings).
- Database supported profiles for satellite transmission (Modulator, Encoder, HPA settings).
- Plausibility check and control (in case of wrong parameter settings).

- · Management of motorized and fixed antennas.
- Logging of all processes, alarms, events.
- · Logging of parameter and status data and graphical presentation.
- Customization.
- Platform-independent client / server system.

## SELECTED REFERENCES

- Earth Stations: WDR Up-Link, Danish Radio, NENT Sport Sweden, TV2 Norway, Nilesat Egypt
- Subsystems: SES Antenna systems, SR, Deutsche Welle
- SNGs: NDR, SWR, SR, BR, RBB

The Hiltron HMCS software is completely hardware independent. The design is based on the longstanding practical experience and exchange with different customers.

It uses a modern graphical user interface with sophisticated alarm message handling and provides for example a highly intuitive and efficient way for a professional satellite line-up procedure.

It provides a quick manageable platform for equipment with the selection of stored profiles, transponders and slots from a database. It supports the operation of market leader HD encoder/modulator/receiver hardware together with Hiltron own products (HCS, HMAM, HACU, HSACU ...). The system allows a uniform operation of different devices from different manufacturers. The flexible design and its functions can be tailored easily to the customer requirement.

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# **HMCS – Hiltron Monitoring and Control System** Universal Solution for Applications

#### System Platform

Based on Java, running under all popular operating systems such as Microsoft Windows, Apple, Linux Java Runtime included

Transponder		L1 L2	Profile		Receiver		
3B Slot 3.002 12A   Load Store Delete		Load	53 HD 16-9 PAA	*			
		Loud	Load Sto	re Delete	Load S	itore Delete	
LineUp: +498918	962301	8 Audios PAA					
Satellite			HD - H.264	▼ 4:2:2 ▼	Scheme	DVB-S2	
Astra 3B at 23.5°E	-	Profile	HD H.264 High 4.1	4:2:2 -	RX Frequency	11.463000 GHz	
On H	<ul> <li>Swap Pol</li> </ul>	Video Source	SDI 💌	PID 308	LO Frequency	10.000 GHz	
TX Frequency	14.263000 GHz	Input Resolution	1080i25 💌		Symbol Rate	7.2	
Allocated Width	9.000 MHz	GOP	IBBP 💌	Length 24 💌	Roll-Off	25%	
Reduced Power	42.5 dBW	Clock Source	Video 💌		Buffer Mode	Low Delay	
Nominal Power	58.5 dBW	Buffer Mode	Low Delay		Test Mode	None	
Designator	GER-NDR-D457	BISS	OFF -	>	BISS		
					BISS ID		
		-	1-2 3-4 5-6 7-8		Matrix Input	BDC low	
Symbol Rate	7.2	Enable	-	-			
Modulation	DVB-S2	Audio PID	256	257			
Coding	16APSK -	Source	Embedded 1 💌	Embedded 2 -			
FEC	3/4 💌	Coding Standard	MPEG L2 -	MPEG L2 -	Span	60 MHz	
Roll-Off	25%	Rit Rate	384 kb/s 👻	384 kb/s 👻	Set Spect	rum-Analyzer	
Pilot	ON -	Coding Mode	8 Channel 💌	1+1 💌			
Occupied Width	9.000 MHz	Lip Sync	0 ms	0 ms			
Set	Set	Set	Set	Set	Set	Set	
Set Modulator 1	Modulator 2	Encoder 1	both Encoders	Encoder 2	IRD 1	IRD 2	
Set		Set	Set	Set	Set		
both Modulators		Line 1	both Lines	Line 2	both IRDs		

Hiltron HACU, HSACU, sat-nms ACU, Vertex ACU7200 Newtec NTC22xx, AZ110, M6100, Mediakind (Ericsson) Voyager II, Ateme CM5000 Teamcast Vyper Mediakind (Ericsson) Voyager II, Ateme CM5000, CM4202 Mediakind (Ericsson) RX8200, RX1290, TT1260, Ateme DR8400, DR5000 Novelsat NS2000 CPI, Paradise, SpacePath, I2V Work, Peak, Miteq ETL Victor & Hurricane L-Band Matrix Stingray Fiber Systems Hiltron all controllers and ACU's/ DCU's Narda NRA Spectrum Analyzer Agilent & R&S Spectrum Analyzer By color coding of equipment icons. Logging, Alarm Listing Color coded icons with display of the most important parameters.

Lower level sub-menus.

Separate intuitive line-up assistant.

Example for Transmit Assistant

◆ DSNG 6 ×											
Edit Unit Database											
Transponder Service Signal Input Alarms											
SAT	Feed										
ASI	Ant30										
	Satellite ABS3a 3°W										
	Transponder										
	ABS3 Test Transponder										
	Load Store Delete										
	RX Frequency			11.494000 GHz							
	Symbol Rate		22.0000 MS/s		•						
	Polarisation		Horizontal-X		•						
	Schem	e		DVB-S		•					
	Roll-Of	f		35%							
	LO Frequency			9.750 GHz							
	Matrix Input										
	Ant30_HL										
Service	Das Erste HD										
BISS	Clear										
		Active									
Set Values											
Show Spectrum											
Apply Webinterface Close											

Example for Receive Selection

Antenna Control Unit:

**Drivers (Summary)** 

Modulator:

Encoder:

IRD:

Demodulator:

HPA:

Up- / Downconverter:

Accessories:

Alarm Handling Alarm messaging:

**Graphical User Interface (GUI)** Equipment:

Parameter setting:

Line-up:

Additional features:

Spectrum analyzer display with a number of special macros

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