



CTE ACS N+1 N+2 Switchover Unit

ACS N+1 N+2 is the new Switchover Unit from CTE DB. In any main broadcasting station, redundancy is the key to prevent from break of the transmission.



version 4000A 2U

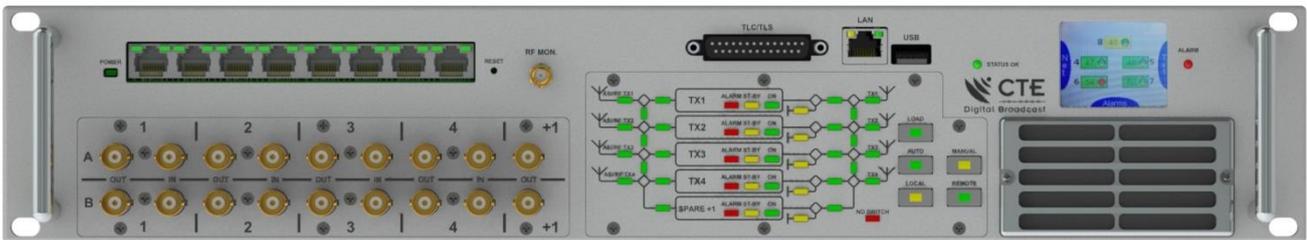
Unit has been engineered to bring the maximum reliability for your transmission, by providing redundancy at 4 levels:

- **N+1 or N+2:** Within a single compact 2U or 3U Rack, ACS offers to broadcasters the ability to bring N+1 or N+2 redundancy management, with up to 7+1 or 6+2 transmitters (ACS N+1 N+2 is optimized for CTE DB Transmitters and Repeaters).
- **Input Stage:** Redundancy at the input stage is also offered (in case two separate distribution networks are used), thanks to 2 independent and parallel ASI matrixes or RF switching matrix or RF passive splitting input circuits implemented in ACS.
- **Power Supply:** ACS does not embed any Power Supply Unit (PSU), as it is capable of using one of the PSUs of the transmitters connected to it.
Therefore, in a 4+1 configuration, ACS divides by 5 the risk of failure!
- **Data Communication:** an IP switch is implemented within ACS for fast and reliable data communication with every transmitter connected. In case the IP link fails, a Serial communication link automatically takes the lead.

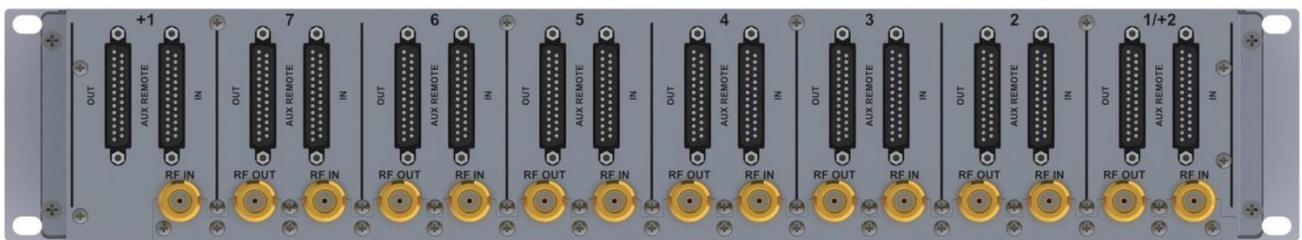


Main Features

- Compact 2U or 3U 19" Rack chassis
- N+1 or N+2 redundant configuration (with up to 7+1 or 6+2 transmitters)
- Several configurations with different input interfaces:
 - Double ASI input matrix
 - RF switching input matrix
 - RF passive input splitting
 - Analogue Video and Audio input matrix
- Embedded RF output matrix
- IP or Serial Link data communication
- SNMP, Web Interface and Touch Screen display



2U 4000A version front panel



2U version rear panel



Technical Specifications

GENERAL

Configuration:	N+1, N+2, N+1+M+1
N<8	ACS 2U and 2E
N<5	ACS 3U and 4000 Series
RF output matrix:	Integrated, PCB relays system for power up to 80W or 350W rms or External coaxial relays
RF impedance:	50 Ohm
RF connectors:	N (f) up to 130W rms 7/16 (f) up to 350W rms
Input matrix:	According to Coaxial relays (ACS 2E and 4000) DVB-ASI / BTS / SMPTE-310M or RF switching matrix or RF passive distribution or Analog Video & Audio (optional)
Input connectors:	BNC (f) 75 Ohm, or N (f) 50 Ohm, or SMA (f) 50 Ohm (according to needed configuration)
Slave management:	Ethernet 10/100/1000 BaseT RS-485 Dry Contact consensus
IP communication:	Integrated 8 or 16 ports IP Switch
IP connectors:	RJ-45
AUX connectors:	DB-25
Data logger:	Integrated with storage of events and alarms
Firmware upgrade:	via USB port or via Web GUI

CONTROLS

MANAGEMENT	TFT touchscreen display GUI Java interface SNMP GPIO
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SERIES 4000 SPECIFIC DATA

Control:	Local or Remote, Automatic or Manual
Status overview:	Synoptic, on the front panel
Priority management:	Fully customizable
thresholds and retries:	Fully customizable
Dummy load:	Internal with possibility to connect any unit of the system (ACS 4080 and 4350 only)

ELECTRICAL

No power supply integrated.
DC supplied by slaves through AUX connectors

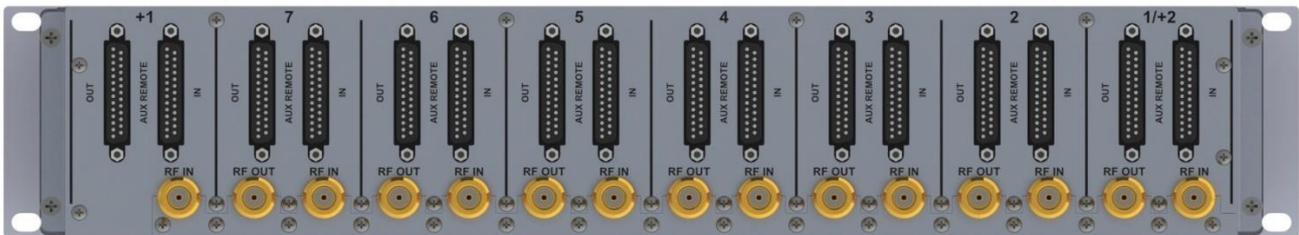
MECHANICALS

Chassis:	2U rack 19" (ACS 2E, 2U, 4000 Series) 3U rack 19" (ACS 3U)
Width:	483 mm
Depth:	350 mm
Height:	88,1 mm (ACS 2E, 2U, 4000 Series) 132,5 mm (ACS 3U)
Weight:	6 Kg

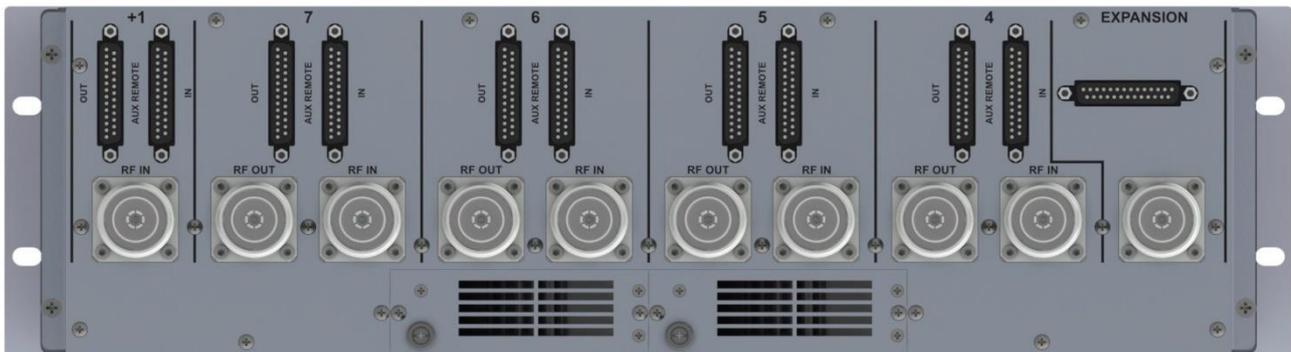
ENVIRONMENTAL

Operating temperature range:	-5°C ÷ 45°C
Max. relative humidity:	90% non condensing

Specifications are subject to change without notice.



2U version rear panel with N connectors



3U version rear panel with 7/16" connectors



Ordering info

Models	
ACS 4000R	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 repeaters/gap-fillers, including IP switch 8 ports and RF input splitter - External relays version (relays NOT incl.)
ACS 4080R	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 repeaters/gap-fillers, including IP switch 8 ports, RF input splitter and internal dummy load - Max. input 80W rms per channel
ACS 4130R	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 repeaters/gap-fillers, including IP switch 8 ports , RF input splitter and internal dummy load - Max. input 130W rms per channel
ACS 4350R	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 repeaters/gap-fillers, including IP switch 8 ports , RF input splitter and internal dummy load - Max. input 350W rms per channel
ACS 4000RS	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 repeaters/gap-fillers, including IP switch 8 ports and RF input matrix - External relays version (relays NOT incl.)
ACS 4080RS	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 repeaters/gap-fillers, including IP switch 8 ports, RF input matrix and internal dummy load - Max. input 80W rms per channel
ACS 4130RS	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 repeaters/gap-fillers, including IP switch 8 ports , RF input matrix and internal dummy load - Max. input 130W rms per channel
ACS 4350RS	RF IN/OUT Automatic switch-over matrix for systems composed by up to 4+1 repeaters/gap-fillers, including IP switch 8 ports , RF input matrix and internal dummy load - Max. input 350W rms per channel
ACS 4000A	ASI/RF Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 transmitters, including IP switch 8 ports and ASI input matrix - External relays version (relays NOT incl.)
ACS 4080A	ASI/RF Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 transmitters, including IP switch 8 ports, ASI input matrix and internal dummy load - Max. input 80W rms per channel
ACS 4130A	ASI/RF Automatic switch-over matrix for systems composed by up to 4+1 or 3+2 transmitters, including IP switch 8 ports, ASI input matrix and internal dummy load - Max. input 130W rms per channel
ACS 4350A	ASI/RF Automatic switch-over matrix for systems composed by up to 4+1 transmitters, including IP switch 8 ports, ASI input matrix and internal dummy load - Max. input 350W rms per channel
ACS 2E	ASI/RF Automatic switch-over matrix for N+1 or N+2 systems (up to 7+1 or 6+2), including IP switch 16 ports, - External relays version (relays NOT incl.)
ACS 2U	ASI/RF Automatic switch-over matrix for N+1 or N+2 systems (up to 7+1 or 6+2), including IP switch 16 ports - Max. input 80W rms per channel
ACS3U	ASI/RF Automatic switch-over matrix for N+1 systems (up to 4+1), including IP switch 16 ports - Max. input 350W rms per channel

Options

Options	
R01	External 4 ports coaxial relay for ACS 2E or 4000, N connectors
R02	External 4 ports coaxial relay for ACS 2E or 4000, 7/16 connectors
R03	External 4 ports coaxial relay for ACS 2E or 4000, 7/8" connectors
R04	External 4 ports coaxial relay for ACS 2E or 4000, 1+5/8" connectors
R05	External 4 ports coaxial relay for ACS 2E or 4000, 3+1/8" connectors