



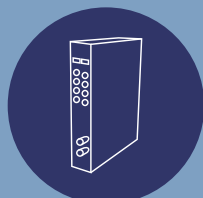
EKSELANS BY ITS

CM HEADEND 2023

FLEXIBLE AND
INTELLIGENT
MODULATION



ENTER THE EK WORLD



COMPACT RANGE



CM COMPACT

REFERENCE		CM COMPACT 2S2
Code		085006
INPUTS		
Number of tuners		2
Input connectors		2+2 (loop)
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Channel bandwidth	MHz	36
Symbol rate	MSps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
LNB power supply	V / KHz	13/18 - 0/22 (350mA máx*)
DiSEqC		A / B / C / D
OUTPUT		
Number of outputs		1+1 (RFMIX)
MIX Port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T Modulation		
Number of channels		2 flexibles
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C Modulation		
Number of channels		2 flexibles
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local Programming		Cable USB (included)
Power supply	Vdc	5 (power supply included)
Consumption (Without LNB)	mA	1000
Operating temperature	°C	0 - 40
Dimensions (including connectors)	mm	160 x 55 x 200

CM COMPACT 2S2

- ✓ TWIN module with 2 satellite inputs and 2 tuners (DVB-S / S2 / S2X).
- ✓ Independent control of each tuner 13V/18V – 22 KHz – DiSEqC (A/B/C/D)
- ✓ Flexible service remultiplexing on each output MUX
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ Output of up to 4 channels (CM COMPACT 8S4) or 8 channels in 2 groups of 4+4 (CM COMPACT 8S8)
- ✓ COFDM / QAM programmable output
- ✓ High output level
- ✓ Excellent quality output signal. High MER
- ✓ LCN / LCN HD Insertion
- ✓ Programming through “CM Management” PC software
- ✓ Power supply and USB-USB cable included



CM COMPACT 2S2

CH3 COMPACT

- ✓ 3-unit wall chassis COMPACT series



CH3 COMPACT

CM COMPACT

CM COMPACT 8S4

- ✓ OCTO module with 4 satellite inputs and 8 tuners (DVB-S / S2 / S2X). Supports multistream
- ✓ Independent control of each tuner 13V/18V – 22 KHz – DiSEqC (A/B/C/D)
- ✓ Flexible service remultiplexing on each output MUX
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ Output of up to 4 channels (CM COMPACT 8S4) or 8 channels in 2 groups of 4+4 (CM COMPACT 8S8)
- ✓ COFDM / QAM programmable output
- ✓ High output level
- ✓ Excellent quality output signal. High MER
- ✓ LCN / LCN HD Insertion
- ✓ Programming through “CM Management” PC software
- ✓ Power supply and USB-USB cable included



REFERENCE		CM COMPACT 8S4
Code		085001
INPUTS		
Number of tuners		8
Input connectors		4
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Channel bandwidth	MHz	36
Symbol rate	MSps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
LNB power supply	V / KHz	13/18 - 0/22 (400mA max.)
DiSEqC		A / B / C / D
OUTPUT		
Number of outputs		1
MIX Port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T Modulation		
Number of channels		4 adjacents
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C Modulation		
Number of channels		4 adjacents
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local Programming		Cable USB (included)
Power supply	Vdc	5 (power supply included)
Consumption (Without LNB)	mA	1000
Operating temperature	°C	0 - 40
Dimensions (including connectors)	mm	160 x 55 x 200
Medidas (incluye conectores)	mm	160 x 55 x 200

CM COMPACT

REFERENCE		CM COMPACT 8S8
Code		085002
INPUTS		
Number of tuners		8
Input connectors		4
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Channel bandwidth	MHz	36
Symbol rate	MSps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
LNB power supply	V / KHz	13/18 - 0/22 (400mA max.)
DiSEqC		A / B / C / D
OUTPUT		
Number of outputs		1
MIX Port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T Modulation		
Number of channels		8 en dos grupos de 4+4 adyacentes
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		8 en dos grupos de 4+4 adyacentes
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local Programming		Cable USB (included)
Power supply	Vdc	5 (power supply included)
Consumption (Without LNB)	mA	2300
Operating temperature	mA	250 a 13V
Dimensions (including connectors)	°C	0 - 40
Medidas (incluye conectores)	mm	160 x 55 x 200

CM COMPACT 8S8

- ✓ Módulos OCTO con 4 entradas de satélite y 8 tuners (DVB-S/S2/S2X). Soporta multistream
- ✓ Control independiente de cada entrada 13/18V - 22KHz - DiSEqC (A/B/C/D)
- ✓ Remultiplexación flexible de servicios en cualquier canal de salida
- ✓ Edición tablas NIT, SID remapping y paso o supresión de mensajes EMM y tablas CAT
- ✓ Salida de hasta 8 canales en 2 grupos de 4+4
- ✓ Salida QAM/COFDM programable
- ✓ Alto nivel de salida
- ✓ Excelente calidad de la señal de salida con un MER alto
- ✓ Inserción LCN / LCN HD
- ✓ Programación a través de SW PC ("CM Management")
- ✓ Fuente de alimentación y cable USB-USB incluidos



CM COMPACT

CM COMPACT PLUS 8S4

NEW

- ✓ OCTO modules with 4 satellite inputs and 8 tuners (DVB-S / S2 / S2X). Supports multistream
- ✓ Independent control of each input 13V/18V – 22 KHz – DiSEqC (A/B/C/D)
- ✓ Flexible service remultiplexing on each output MUX
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Output of up to 4 channels (CM COMPACT 8S4) or 8 channels in 2 groups of 4+4 (CM COMPACT 8S8)
- ✓ COFDM / QAM programmable output
- ✓ Modular power supply with integrated output amplifier with a level up to 112dBμV
- ✓ Excellent quality output signal with high MER
- ✓ LCN / LCN HD Insertion
- ✓ Programming through SW PC ("CM Management")



CM COMPACT PLUS 8S4

HIGH
OUTPUT
LEVEL
112 dBμV

EXCELENT
MER QUALITY
LEVEL

PLUG
AND
PLAY KIT

SUPPORTS
UP TO 4
QUATTRO
LNB

REFERENCE		CM COMPACT PLUS 8S4
Code		085007
INPUT		
Number of tuners		8
Input connectors		4
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Channel bandwidth	MHz	36
Symbol rate	MSps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Remote feeding	V / KHz	13/18 - 0/22 (350mA máx.)
DiSEqC		A / B / C / D
OUTPUT		
Number of outputs		1
MIX Port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	112
Output regulation	dB	20
DVB-T Modulation		
Number of channels		4 adjacents
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C Modulation		
Number of channels		4 adjacents
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local Programming		USB cable (included)
Power supply	Vdc / A	5 - 10
Consumption (Without LNB)	mA	1800
Operating temperature	°C	0 - 40

CM COMPACT

REFERENCE		CM COMPACT PLUS 8S8
Code		085008
INPUT		
Number of tuners		8
Input connectors		4
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Channel bandwidth	MHz	36
Symbol rate	MSps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Remote feeding	V / KHz	13/18 - 0/22 (700mA máx.)
DiSEqC		A / B / C / D
OUTPUT		
Number of outputs		1
MIX Port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	108
Output regulation	dB	20
DVB-T Modulation		
Number of channels		8 in two adjacent 4 + 4 groups
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C Modulation		
Number of channels		8 in two adjacent 4 + 4 groups
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local Programming		USB cable (included)
Power supply	Vdc / A	5 - 10
Consumption (Without LNB)	mA	2300
Operating temperature	°C	0 - 40

CM COMPACT PLUS 8S8

NEW

- ✓ OCTO modules with 4 satellite inputs and 8 tuners (DVB-S / S2 / S2X). Supports multistream
- ✓ Independent control of each input 13V/18V – 22 KHz – DiSEqC (A/B/C/D)
- ✓ Flexible service remultiplexing on each output MUX
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Output of up to 4 channels (CM COMPACT 8S4) or 8 channels in 2 groups of 4+4 (CM COMPACT 8S8)
- ✓ COFDM / QAM programmable output
- ✓ Modular power supply with integrated output amplifier with a level up to 112dBμV
- ✓ Excellent quality output signal with high MER
- ✓ LCN / LCN HD Insertion
- ✓ Programming through SW PC ("CM Management")



CM COMPACT PLUS 8S8

HIGH
OUTPUT
LEVEL
112 dBuV

EXCELENT
MER QUALITY
LEVEL

PLUG
AND
PLAY KIT

SUPPORTS
UP TO 4
QUATTRO
LNB

CM COMPACT

KIT CM COMPACT AV8

NEW

- ✓ Headend kit to convert 8 DVB-T/DVB-T2 services - H264/H.265 in to COFDM SD MPEG 2
- ✓ 2 COFDM multiplex at the output
- ✓ Professional modulation quality
- ✓ Simple and intuitive programming
- ✓ Allows you to respect the existing channels in installation without reprogramming TVs.

CONVERTS
8 DTT HD
SERVICES
TO SD



KIT CM
COMPACT AV8

REFERENCE	KIT CM COMPACT AV 8
Code	085005
INPUT	
Number of RF inputs	1
Number of tuners	8
Input frequency	47-862 MHz
Impedance	75 Ohm
Input level	-82 a -20dBm
OUTPUT	
Number of RF outputs	1
Output frequency	170 - 862 MHz
Maximum output level	95 dBuV
Modulation	COFDM selectable
Number of MUX	2 COFDM
MER	>35dB (COFDM)
GENERAL	
Programming	On-site with CM Management software
Power	AC100-240V. 50/60Hz
Modular power supply	FA524 IN: AC100-240V. 50/60Hz - OUT: 5Vdc
Working temperature	0 - 40°C

CM RANGE SATELLITE INPUT



SATELLITE INPUT RF OUTPUT

REFERENCE		CM 2S 2CI-2TC
Code		082327
INPUT		
Number of tuners		2
Input connectors		2+2 (loop)
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Telepower (LNB)		350mA máx*
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		2 x CI
DiSEqC		A / B / C / D
OUTPUT		
Number of outputs		1+1 (RFMIX)
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		2 flexibles
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		2 flexibles
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>35
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	1200
Operating temperature	°C	0 - 40

CM 2S 2CI-2TC

NEW

- ✓ TWIN module with 2 SAT inputs and 2 tuners (DVB-S/ S2).
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Flexible remultiplexing of services on any output channel
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 2 channels COFDM / 2 QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots

2 COMMON
INTERFACE

CM 2S 2CI-2TC

SATELLITE INPUT RF OUTPUT

CM 8S 2CI-4TC

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners (DVB-S/ S2/S2X). Supports multistream
- ✓ BISS compatible
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Unicable LNB Support: SatCR/dCSS
- ✓ Flexible remultiplexing of services on any output channel
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



REFERENCE		CM 8S 2CI-4TC
Code		082323
INPUT		
Number of inputs		4x RF
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		2 x CI
DiSEqC		A / B / C / D
Unicable		SatCR / dCSS
OUTPUT		
Number of outputs		1+1 (RFMIX)
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		4 adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>35
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	2000
Operating temperature	°C	0 - 40

SATELLITE INPUT RF OUTPUT

REFERENCE		CM 8S 2CI-8TC
Code		082324
INPUT		
Number of inputs		4x RF
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		2 x CI
DiSEqC		A / B / C / D
Unicable		SatCR / dCSS
OUTPUT		
Number of outputs		1+1 (RFMIX)
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		8 (4+4) adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		8 (4+4) adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>35
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	2500
Operating temperature	°C	0 - 40

CM 8S 2CI-8TC

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners (DVB-S/ S2/S2X). Supports multistream
- ✓ BISS compatible
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Unicable LNB Support: SatCR/dCSS
- ✓ Flexible remultiplexing of services on any output channel
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 8 channels COFDM / 8 QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



SATELLITE INPUT RF OUTPUT

CM 8S 4CI-4TC

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners (DVB-S/ S2/S2X). Supports multistream
- ✓ BISS compatible
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Unicable LNB Support: SatCR/dCSS
- ✓ Flexible remultiplexing of services on any output channel
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 4 common interface slots



REFERENCE		CM 8S 4CI-4TC
Code		082325
INPUT		
Number of inputs		4x RF
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		4 x CI
DiSEqC		A / B / C / D
Unicable		SatCR / dCSS
OUTPUT		
Number of outputs		1+1 (RFMIX)
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		4 adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>35
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	2200
Operating temperature	°C	0 - 40

SATELLITE INPUT RF OUTPUT

REFERENCE		CM 8S 4CI-8TC
Code		082326
INPUT		
Number of inputs		4x RF
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		4 x CI
DiSEqC		A / B / C / D
Unicable		SatCR / dCSS
OUTPUT		
Number of outputs		1+1 (RFMIX)
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		8 (4+4) adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		8 (4+4) adjacent channels
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>35
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	2700

CM 8S 4CI-8TC

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners (DVB-S/ S2/S2X). Supports multistream
- ✓ BISS compatible
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Unicable LNB Support: SatCR/dCSS
- ✓ Flexible remultiplexing of services on any output channel
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 8 channels COFDM / 8 QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 4 common interface slots



SATELLITE INPUT RF OUTPUT

CM 8SH-TC

- ✓ OCTO module with 4 SAT inputs and 8 tuners
- ✓ 1 HDMI input
- ✓ 1 USB 2.0 input
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Flexible remultiplexing of services on any output channel
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ Flexible QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 flexible QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)



REFERENCE		CM 8SH-TC
Code		082255
INPUT		
Number of inputs		4x RF + 1x HDMI + 1x USB
RF INPUT		
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
LNB power supply	V / KHz	13/18 - 0/22
DiSEqC		A / B / C / D
USB		
Priority		1
Version		2.0
File System		FAT32 / NTFS
Reproduction		Autoplay, List, Time schedule
File format		.TS (Transport Stream)
HDMI		
Priority		2
Video / Bitrate	- / Mbps	H.264 / 5 - 15
Audio / Bitrate	- / Kbps	AAC-LC, MPEG1-L2 / 128 - 384
Max resolution		1080p
OUTPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>32
DVB-C modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 y 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>32
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no USB, no CAM, no HDMI)	mA	4100
Operating temperature	°C	0 - 40

SATELLITE INPUT RF OUTPUT

REFERENCE		CM 8SH CI-TC
Code		082256
INPUT		
Number of inputs		4x RF + 1x HDMI + 1x USB
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
LNB power supply	V / KHz	13/18 - 0/22
Common interface		2 x CI
DiSEqC		A / B / C / D
USB		
Priority		1
Version		2.0
File System		FAT32 / NTFS
Reproduction		Autoplay, List, Time schedule
File format		.TS (Transport Stream)
HDMI		
Priority		2
Video / Bitrate	- / Mbps	H.264 / 5 - 15
Audio / Bitrate	- / Kbps	AAC-LC, MPEG1-L2 / 128 - 384
Max resolution		1080p
OUTPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>32
DVB-C modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>32
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no USB, no CAM, no HDMI)	mA	4300
Operating temperature	°C	0 - 40

CM 8SH CI-TC

- ✓ OCTO module with 4 SAT inputs and 8 tuners
- ✓ 1 HDMI input
- ✓ 1 USB 2.0 input
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Flexible remultiplexing of services on any output channel
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 flexible QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



2 COMMON
INTERFACE

USB AND
HDMI
INPUT

CM 8SH
CI-TC

SATELLITE INPUT RF+IP OUTPUT

CM 8SH TC/IP

- ✓ OCTO module with 4 SAT inputs and 8 tuners
- ✓ 1 HDMI input
- ✓ 1 USB 2.0 input
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)

TC output

- ✓ Flexible remultiplexing of services on any output channel
- ✓ Editing NIT tables, SID remapping and passing or deleting EMM messages and CAT tables
- ✓ Flexible QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 flexible QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ LCN / LCN HD insert

IP output

- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 16 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint



NOW
WITH 64
STREAMS

USB AND
HDMI
INPUT

CM 8SH
TC/IP

REFERENCE		CM 8SH TC-IP
Code		082257
INPUT		
Number of inputs		4x RF + 1x HDMI + 1x USB
RF INPUT		
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
DiSEqC		A / B / C / D
USB		
Priority		1
Version		2.0
File System		FAT32 / NTFS
Reproduction		Autoplay, List, Time schedule
File format		.TS (Transport Stream)
HDMI		
Priority		2
Video / Bitrate	- / Mbps	H.264 / 5 - 15
Audio / Bitrate	- / Kbps	AAC-LC, MPEG1-L2 / 128 - 384
Max resolution		1080p
TC OUTPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 y 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>32
DVB-C modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>32
IP OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query and IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no USB, no CAM, no HDMI)	mA	4600
Operating temperature	°C	0 - 40

SATELLITE INPUT IP OUTPUT

REFERENCE		CM 8S 2CI-IP
Code		082295
INPUT		
Number of inputs		4 x RF
RF INPUT		
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		2 x CI
DiSEqC		A / B / C / D
Unicable		SatCR / dCSS
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		64 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query and IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	2000
Operating temperature	°C	0 - 40

CM 8S 2CI-IP

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners (DVB-S/ S2/S2X). Supports multistream
- ✓ BISS compatible
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Unicable LNB Support: SatCR/dCSS
- ✓ IP output gigabit 1Gbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 64 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



SATELLITE INPUT IP OUTPUT

CM 8S 4CI-IP

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners (DVB-S/ S2/S2X). Supports multistream
- ✓ BISS compatible
- ✓ Independent control of each input 13 / 18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ Unicable LNB Support: SatCR/dCSS
- ✓ IP output gigabit 1Gbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 64 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 4 common interface slots



REFERENCE		CM 8S 4CI-IP
Code		082322
INPUT		
Number of inputs		4 x RF
RF INPUT		
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
Common interface		4 x CI
DiSEqC		A / B / C / D
Unicable		SatCR / dCSS
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		64 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query and IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no CAM)	mA	2200
Operating temperature	°C	0 - 40

SATELLITE INPUT IP OUTPUT

REFERENCE		CM 8S-IP
Code		082294
INPUT		
Number of inputs		4 x RF
RF INPUT		
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepowering	V / KHz	13/18 - 0/22
Maximum current per LNB input	mA	500
LNB's maximum total current	mA	750
DiSEqC		A / B / C / D
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		64 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query e IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	3500
Operating temperature	°C	0 - 40

CM 8S-IP

NEW

- ✓ OCTO module with 4 SAT inputs and 8 tuners
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 16 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)



SATELLITE INPUT IP OUTPUT

CM 8SH-CI IP

- ✓ OCTO module with 4 SAT inputs and 8 tuners
- ✓ 1 HDMI input
- ✓ 1 USB 2.0 input
- ✓ Independent control of each input 13/18V - 22KHz - DiSEqC (A / B / C / D)
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 16 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



REFERENCE		CM 8SH-CI-IP
Code		082263
INPUT		
Number of inputs		4x RF + 1x HDMI + 1x USB
RF INPUT		
Number of tuners		8
Input frequency	MHz	950 - 2150
Input level	dBμV	40 - 79
Symbol rate	Mbps	1 - 45
Modulation type		QPSK / 8PSK / 16APSK / 32APSK
Telepower	V / KHz	13/18 - 0/22
DiSEqC		A / B / C / D
USB		
Priority		1
Version		2.0
File System		FAT32 / NTFS
Reproduction		Autoplay, List, Time schedule
File format		.TS (Transport Stream)
HDMI		
Priority		2
Video / Bitrate	- / Mbps	H.264 / 5 - 15
Audio / Bitrate	- / Kbps	AAC-LC, MPEG1-L2 / 128 - 384
Max resolution		1080p
COMMON INTERFACE		
Slots		2
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query and IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (No LNB, no USB, no CAM, no HDMI)	mA	3700
Operating temperature	°C	0 - 40

TERRESTRIAL/ CABLE INPUT



TERRESTRIAL/CABLE INPUT · RF OUTPUT

REFERENCE		CM 4T-TC
Code		082258
INPUT		
Number of inputs		1x RF
Number of tuners		4
DVB-T / T2 reception		
Input frequency	MHz	110 - 862
Input level	dBμV	33-88
Constellation - Mode		QPSK, 16, 64, 256QAM 1K, 2K, 4K, 8K, 16K, 32K
DVB-C reception		
Input frequency	MHz	110 - 862
Input level	dBμV	46 - 88
Constellation - Mode	- / MHz	QPSK, 16, 32, 64, 128, 256 QAM / 6, 7, 8
Symbol rate	MSps	0,2 - 7,7
OUPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>32
DVB-C modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>32
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	2300
Operating temperature	°C	0 - 40

CM 4T-TC

- ✓ QUAD terrestrial and cable module (DVB-T / T2 / C)
- ✓ 1 input / 4 independent tuners
- ✓ Input LOOP
- ✓ Flexible remultiplexing of services on any output channel
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 flexible QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with high MER
- ✓ LCN / LCN HD insert
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)



TERRESTRIAL/CABLE INPUT· RF OUTPUT

CM 4T CI-TC

- ✓ QUAD terrestrial and cable module (DVB-T / T2 / C)
- ✓ 1 input / 4 independent tuners
- ✓ Input LOOP
- ✓ Flexible remultiplexing of services on any output channel
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ Programmable QAM / COFDM output
- ✓ Output of up to 4 channels COFDM / 4 flexible QAM channels
- ✓ High output level
- ✓ Excellent output signal quality with high MER
- ✓ LCN / LCN HD insert
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



REFERENCE		CM 4T CI-TC
Code		082259
INPUT		
Number of inputs		1x RF
Number of tuners		4
DVB-T / T2 reception		
Input frequency	MHz	110 - 862
Input level	dBμV	33-88
Constellation - Mode		QPSK, 16, 64, 256QAM 1K, 2K, 4K, 8K, 16K, 32K
DVB-C reception		
Input frequency	MHz	110 - 862
Input level	dBμV	46 - 88
Constellation - Mode	- / MHz	QPSK, 16, 32, 64, 128, 256 QAM / 6, 7, 8
Symbol rate	MSps	0,2 - 7.7
Common interface		2 x CI
OUPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
Bandwidth	MHz	7 or 8
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>32
DVB-C modulation		
Number of channels		4 flexible
Output frequency	MHz	170 - 230 / 470 - 862
Constellation		16, 32, 64, 128, 256QAM
Bandwidth	MHz	7 or 8
Symbol rate	MSps	4 ... 6,96
MER	dB	>32
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (no CAM)	mA	2500
Operating temperature	°C	0 - 40

TERRESTRIAL/CABLE INPUT • IP OUTPUT

REFERENCE		CM 4T-IP
Code		082260
INPUT		
Number of inputs		1x RF
Number of tuners		4
DVB-T / T2 reception		
Input frequency	MHz	110 - 862
Input level	dBμV	33-88
Constellation - Mode		QPSK, 16, 64, 256QAM 1K, 2K, 4K, 8K, 16K, 32K
DVB-C reception		
Input frequency	MHz	110 - 862
Input level	dBμV	46 - 88
Constellation - Mode	- / MHz	QPSK, 16, 32, 64, 128, 256 QAM / 6, 7, 8
Symbol rate	MSps	0,2 - 7,7
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query and IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	1700
Operating temperature	°C	0 - 40

CM 4T-IP

- ✓ QUAD terrestrial and cable module (DVB-T / T2 / C)
- ✓ 1 input / 4 independent tuners
- ✓ Input LOOP
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 16 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)



TERRESTRIAL/CABLE INPUT· IP OUTPUT

CM 4T CI-IP

- ✓ QUAD terrestrial and cable module (DVB-T / T2 / C)
- ✓ 1 input / 4 independent tuners
- ✓ Input LOOP
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 16 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)
- ✓ 2 common interface slots



REFERENCE		CM 4T-CI-IP
Code		082261
INPUT		
Number of inputs		1x RF
Number of tuners		4
DVB-T / T2 reception		
Input frequency	MHz	110 - 862
Input level	dBμV	33-88
Constellation - Mode		QPSK, 16, 64, 256QAM 1K, 2K, 4K, 8K, 16K, 32K
DVB-C reception		
Input frequency	MHz	110 - 862
Input level	dBμV	46 - 88
Constellation - Mode	- / MHz	QPSK, 16, 32, 64, 128, 256 QAM / 6, 7, 8
Symbol rate	MSps	0,2 - 7,7
Common interface		2 x CI
OUPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query and IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (no CAM)	mA	1900
Operating temperature	°C	0 - 40

TERRESTRIAL/CABLE INPUT· IP OUTPUT

REFERENCE		CM 8TC-IP
Code		082293
INPUT		
Number of inputs		1x RF
Number of tuners		8
DVB-T / T2 reception		
Input frequency	MHz	110 - 862
Input level	dBμV	33-88
Constellation - Mode		QPSK, 16, 64, 256QAM 1K, 2K, 4K, 8K, 16K, 32K
DVB-C reception		
Input frequency	MHz	42 - 1002
Input level	dBμV	46 - 88
Constellation - Mode	- / MHz	QPSK, 16, 32, 64, 128, 256 QAM / 6, 7, 8
Symbol rate	MSps	1 - 7.2
Supported annexes		A, B y C
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		64 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
Features		IGMP Query e IGMP Auto-Joint
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	1700
Operating temperature	°C	0 - 40

CM 8TC-IP

NEW

- ✓ OCTO terrestrial and cable module (DVB-T / T2 / C)
- ✓ 1 input / 8 independent tuners
- ✓ Input LOOP
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Up to 16 output streams
- ✓ SAP function
- ✓ IGMP Query and IGMP Auto-Joint
- ✓ Programming via SW PC ("CM Management")
- ✓ Configuration cloning and reporting
- ✓ On-site management (FA 510 / CM PR) or remote (FA 524)



CM 8TC-IP

AV/HDMI INPUT



AV/HDMI INPUT RF OUTPUT

REFERENCE		CM 4HD-TC
Code		082004
INPUT		
Number of inputs		4 (A1, B1, A2, B2)
A/V		
HDMI		
Video / Bitrate	- / Mbps	H.264 / 5 - 15
Audio / Bitrate	- / Kbps	AAC-LC, MPEG1-L2 / 128 - 384
Maximum resolution		1080p
OUTPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequencies	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		2
Output frequencies	MHz	170 - 862
Constellation - Modo		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		2
Output frequencies	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	3000
Working temperature	°C	0 - 40

CM 4HD-TC

- ✓ 4 HDMI (HD) inputs
- ✓ Resolution of each input up to 1080p
- ✓ Programmable COFDM / QAM output
- ✓ Programming through "CM Management" PC software
- ✓ Remote management from FA 524 or CM PR



AV/HDMI INPUT RF OUTPUT

CM 2AV-T

- ✓ Multifunction headers series CM Encoder 2 A/V to COFDM / DTT
- ✓ 2 audio / video inputs (CVBS)
- ✓ Flexible COFDM output
- ✓ Programming through "CM Management" PC software
- ✓ Remote management from FA 524 or CM PR



REFERENCE	CM 2AV-T
Code	082025
INPUT	
Number of video inputs	2 x CVBS
Video resolution mode	PAL (720x576) / NTSC (720X480)
Video compression	MPEG 2
Number of audio inputs	2 x audio stereo / 0.5-2.5 Vpp
Sample rate	48 KHz
Compression audio	MPEG1, LAYER II
DVB processing	Table insertion PAT, PNT, SDT, NIT
Configuration	NOMBRE DE PROGRAMA, SID, LCN, NETWORK NAME, TSD, ONID, NID, VERSION NIT, LCN, PMT
OUTPUT	
Number of outputs	1 + loop-through (-1,5 dB)
Maximum output level	95 dBμV
Output regulation	20 dB (por software)
Output frequency	170-230 MHz + 470-862 MHz
Output MUXES	1 COFDM
Channel width	7 MHz (VHF) / 8 MHz (UHF)
COFDM modulation mode	2K / 8K
Constellation - FEC COFDM	QPSK/16QAM/64QAM 1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	1/4, 1/8, 1/16, 1/32
MER	> 32dB
VARIOS	
Programming	PC software "CM management" via USB connected to the FA 524 / CM PR source
Power supply	5 Vdc
Consumption	1,2 A
Working temperature	0 – 40°

AV/HDMI INPUT RF OUTPUT

REFERENCE	CM 4AV-TC
Code	082003
Inputs	
Number of video inputs	4 x CVBS
Video resolution mode	PAL (720x576) / NTSC (720x480)
Video compression	MPEG 2
Number of audio inputs	4 x audio stereo / 0.5-2.5 Vpp
Sample rate	48 KHz
Audio compression	MPEG1, LAYER II
DVB processing	Insertion of table PAT, PNT, SDT, NIT
Configuration	Program name, SID, LCN, NETWORK NAME, TSD, ONID, NID, VERSION NIT, LCN, PID, PMT, PID VIDEO, PID AUDIO
Output	
Number of outputs	1 + loop-through (-1,5 dB)
Maximum output level	95 dBμV
Output regulation	20 dB (by software)
Output frequency	170-230 MHz + 470-862 MHz
Output MUXES	1 COFDM or 1 QAM
Channel bandwidth	7 MHz (VHF) / 8 MHz (UHF)
COFDM modulation mode	2K / 8K
Constellation - FEC COFDM	QPSK/16QAM/64QAM - 1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	1/4, 1/8, 1/16, 1/32
Constellation- S/R QAM	16, 32, 64, 128, 256 QAM (EN 300 429) - 4,00 - 6,96 Msps
MER	> 35dB
Various	
Programming system	PC software "CM management" through USB cable connected to power supply FA 524
Working voltage	5 Vdc
Current consumption	2 A
Temperature margin	0 - 40°

CM 4AV-TC

- ✓ 4 audio/video inputs (CVBS)
- ✓ Flexible COFDM output
- ✓ Programming through "CM Management" PC software
- ✓ Remote management from FA 524 or CM PR



CM 4AV-TC

AV/HDMI INPUT IP OUTPUT

CM 4AV-IP

- ✓ 4 audio/video inputs (CVBS) to IP multicast modulators
- ✓ Encoding parameters setting
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Flexible remultiplexing of services on IP egress
- ✓ SAP function
- ✓ Up to 16 output streams
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ Remote management from FA 524 using CM KEY



REFERENCE		CM 4AV-IP
Code		082007
INPUT		
Number of inputs		4 (A1, B1, A2, B2)
A/V		
Video		CVBS
Input level	Vpp	0,7 - 1,4
Impedance	Ω	75
Video compression		MPEG2
Video bitrate	Mbps	4 - 12
Audio compression		MPEG1 Layer 2
Audio bitrate	Kbps	128 - 384
HDMI		
Video / Bitrate	- / Mbps	-
Audio / Bitrate	- / Kbps	-
Max resolution		-
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
GENERAL		
Local programming		By USB / RJ45 cable (LAN)
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	2000
Working temperature	°C	0 - 40

ENTRADA AV/ HDMI

SALIDA IP

REFERENCE		CM 4HD-IP
Code		082008
INPUT		
Number of inputs		4 (A, B, C, D)
A/V		
HDMI		
Video / Bitrate	- / Mbps	H.264 / 5 - 15
Audio / Bitrate	- / Kbps	AAC-LC, MPEG1-L2 / 128 - 384
Max resolution		1080p
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Protocols		UDP / RTP / QoS / SAP
GENERAL		
Local programming		By USB / RJ45 cable (LAN)
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption	mA	2400
Working temperature	°C	0 - 40

CM 4HD-IP

- ✓ 4 HDMI (HD) inputs to IP multicast modulators
- ✓ Encoding parameters setting
- ✓ IP output 100Mbps SPTS / MPTS in UDP / RTP format
- ✓ Flexible remultiplexing of services on IP output
- ✓ SAP function
- ✓ Up to 16 output streams
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ Remote management from FA 524 using CM KEY



IP INPUT



IP INPUT RF OUTPUT

REFERENCE		CM IP-TC
Code		082018
INPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		15 (SPTS / MPTS)
Supported protocols		IEEE 802.3, SPTS/ MPTS, UDP, RTP, QoS
Local IP assignment		DHCP / Estática
PCR (Program Clock Reference)		Acorde con ETSI TR 101 290
COMMON INTERFACE		
Slots		-
OUTPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequency	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		3
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		4
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local programming		Por cable USB / RJ45 (LAN)
Remote programming		Por RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (without CAM)	mA	1800
Working temperature	°C	0 - 40

CM IP-TC

- ✓ Input up to 15 IP Unicast / Multicast services
- ✓ Supported protocols: SPTS / MPTS, UDP / RTP, SIP, QoS
- ✓ Support services with different input bit rates
- ✓ Programmable QAM / COFDM output
- ✓ Flexible remultiplexing of services on IP output
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ LCN / LCN HD insert
- ✓ Output connector or input connector for mixing
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ Remote management from FA 524 using CM KEY



IP INPUT RF OUTPUT

CM IP CI-TC

- ✓ Input up to 15 IP Unicast / Multicast services
- ✓ Supported protocols: SPTS / MPTS, UDP / RTP, SIP, QoS
- ✓ Support services with different input bit rates
- ✓ Programmable QAM / COFDM output
- ✓ Flexible remultiplexing of services on IP output
- ✓ NIT tables editing, SID remapping, sending or deleting EMM messages and CAT tables
- ✓ LCN / LCN HD insert
- ✓ Output connector or input connector for mixing
- ✓ High output level
- ✓ Excellent output signal quality with a high MER
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ Remote management from FA 524 using CM KEY



REFERENCE		CM IP CI-TC
Code		082019
INPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		15 (SPTS / MPTS)
Supported protocols		IEEE 802.3, SPTS/ MPTS, UDP, RTP, QoS
Local IP assignment		DHCP / Static
PCR (Program Clock Reference)		According to ETSI TR 101 290
COMMON INTERFACE		
Slots		2
OUTPUT		
Number of outputs		1
Mixing port	dB	<1,5
Output frequency	MHz	170 - 862
Maximum output level	dBμV	95
Output regulation	dB	20
DVB-T modulation		
Number of channels		4
Output frequency	MHz	170 - 862
Constellation - Mode		QPSK, 16QAM, 64QAM - 2K
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Guard interval		1/4, 1/8, 1/16, 1/32
MER	dB	>35
DVB-C modulation		
Number of channels		4
Output frequency	MHz	50 - 862
Constellation		16, 32, 64, 128, 256QAM
Symbol rate	Mbps	4 ... 6,96
MER	dB	>40
GENERAL		
Local programming		By USB / RJ45 cable (LAN) with FA 524 or CM PR
Remote programming		By RJ45 (Internet) (CM Key)
Power supply	Vdc	5
Consumption (without CAM)	mA	1500
Working temperature	°C	0 - 40

IP INPUT IP OUTPUT

REFERENCE		CM IP CI-IP
Code		082037
INPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		15 (SPTS / MPTS)
Supported protocols		IEEE 802.3, SPTS/ MPTS, UDP, RTP, QoS
Local IP assignment		DHCP / Static
PCR (Program Clock Reference)		According to ETSI TR 101 290
COMMON INTERFACE		
Slots		2
OUTPUT		
Connector		RJ45 - Fast Ethernet
Routing scheme		Unicast / Multicast
Maximum services		16 (SPTS / MPTS)
Local IP assignment		DHCP / Static
Supported protocols		UDP / RTP / QoS / SAP
GENERAL		
Local programming		USB / RJ45 (LAN)
Remote programming		RJ45 (Internet) + CM Key
Power supply	Vdc	5
Consumption (without CAM)	mA	1000
Working temperature	°C	0 - 40

CM IP CI-IP

- ✓ Input up to 15 IP Unicast / Multicast services
- ✓ Supports services with different input bit rates
- ✓ Passing or deleting EMM messages and CAT tables
- ✓ 100Mbps SPTS / MPTS IP output in UDP / RTP format
- ✓ Flexible remultiplexing of services on IP output
- ✓ SAP function
- ✓ Up to 16 output streams
- ✓ Programming through "CM Management" PC software
- ✓ Configuration cloning. Status and configuration report
- ✓ Remote control built into the FA 524 source using CM KEY



OPTICAL TRANSMISSION



OPTICAL TRANSMISSION

REFERENCE		CM TO 3-1310
Code		274101
RF Input		
Frequency	MHz	47 - 1000
Flatness	dB	±0,75
TV input level	dBμV	70-80*
Input level SAT	dBμV	-
TV + SAT input level	dBμV	-
Input regulation	dBμV	20
Return losses	dB	≥14
Input impedance	Ω	75
Connector		F type
Optical output		
Wavelength	nm	1310
Optical power output	dBm	3
Laser type		DFB
Optical adaptation	dB	>45
Optical connector		SC / APC
Input voltage	Vac	88 - 264
Input frequency	Hz	47 - 63
Peak current	mA	-
LNB Power supply	Vdc KHz	-
Operating temperature	°C	-20...+55

(*) 59 Ch PAL-I analog channels

(**)

(***)

CM TO 3 1310

- ✓ They allow the distribution of radio frequency signal over long distances taking advantage of fiber optics
- ✓ Optical output level indicator LED
- ✓ Input level regulation



CM TO3 1310

OPTICAL TRANSMISSION

CM TO 3 FI-1310

- ✓ They allow the distribution of radio frequency signal over long distances taking advantage of fiber optics
- ✓ Optical output level indicator LED
- ✓ Allows selection of satellite band and polarity
- ✓ Input level regulation



CM TO3 FI 1310

REFERENCE		CM TO 3 FI-1310
Code		274100
RF Input		
Frequency	MHz	47 - 2150
Flatness	dB	±0,75
TV input level	dBμV	70-80*
Input level SAT	dBμV	58-78**
TV + SAT input level	dBμV	72-84***
Input regulation	dBμV	20
Return losses	dB	≥14
Input impedance	Ω	75
Connector		F type
Optical output		
Wavelength	nm	1310
Optical power output	dBm	3
Laser type		DFB
Optical adaptation	dB	>45
Optical connector		SC / APC
Input voltage	Vac	88 - 264
Input frequency	Hz	47 - 63
Peak current	mA	500
LNB Power supply	Vdc kHz	13 - 18 0 - 22
Operating temperature	°C	-20...+55

(*) 59 Ch PAL-I analog channels

(**)

(***)

OPTICAL TRANSMISSION

REFERENCE		CM TO 10 FI-1550
Code		274102
RF Input		
Frequency	MHz	47 - 2150
Flatness	dB	±0,75
TV input level	dBμV	70-80*
Input level SAT	dBμV	58-78**
TV + SAT input level	dBμV	72-84***
Input regulation	dBμV	20
Return losses	dB	≥14
Input impedance	Ω	75
Connector		F type
Optical output		
Wavelength	nm	1550
Optical power output	dBm	10
Laser type		DFB
Optical adaptation	dB	>45
Optical connector		SC / APC
Input voltage	Vac	88 - 264
Input frequency	Hz	47 - 63
Peak current	mA	500
LNB Power supply	Vdc KHz	13 - 18 0 - 22
Operating temperature	°C	-20...+55

(*) 59 Ch PAL-I analog channels

(**)

(***)

CM TO 10 FI-1550

- ✓ Allows the distribution of radio frequency signal over long distances taking advantage of fiber optics
- ✓ Optical output level indicator LED
- ✓ Allows selection of satellite band and polarity
- ✓ Input level regulation

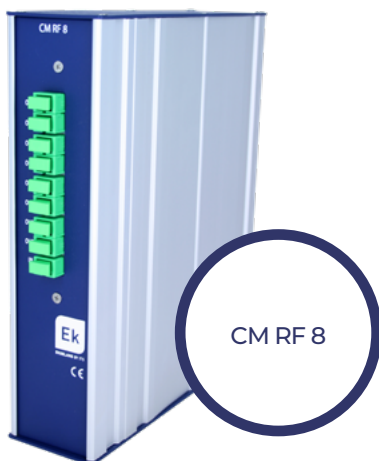


CM TO 10 FI 1550

OPTICAL TRANSMISSION

CM RF 2 • CM RF 4 • CM RF 8

- ✓ Optical splitter with 2, 4 or 8 outputs. CM Headend Compatible



ACCESSORIES



ACCESSORIES

REFERENCE	FA 524
Code	080003
Input voltage	90-253 Vcc
Input frequency	50-60 Hz
Output voltage	24 Vdc
Peak current	5A
Maximum power	120W
Type	Modular
Working temperature	0-45°
Programming mode	USB Connector
Programming	Via PC
Remote management	RJ45 Connector

FA 524

- ✓ High-efficiency power supply
- ✓ With protection fuses against electrical current overload
- ✓ It allows the programming and remote management of complete headend



ACCESSORIES

FA 510

- ✓ High efficiency switching source
- ✓ With protection fuses against electrical current overload

REFERENCE		FA 510
Code		082036
Input voltage	Vac	88 - 264
Input frequency	Hz	47 - 63
Output voltage	Vdc	5
Peak current	A	10
Maximum power	W	50
Type		Modular
Working temperature	°C	0-45



ACCESSORIES

REFERENCE		CM PR
Code	-	082014
Ports	-	Ethernet, USB (Tipo B)
Feeding	-	14 PIN HE bus.
Dimensions	mm	115x28x48

REFERENCE		FA 55
Code	-	082010
Feeding	Vac / Hz	100-240 / 46-63
Output voltage	Vdc	5
Max. output current	mA	5000

CM PR • FA 55

- ✓ It allows the programming of CM Headend modules.
- ✓ Programming via CM Management (USB port).
- ✓ Programming via CM Management in remote (LAN / Internet).
- ✓ Feeding from CM module already fed via FA 55 PSU



ACCESSORIES

CM KEY

- √ CM Key allows the remote connection to the power supply FA 524 through the CM Management software (PC Software that allows the programming of the CM Headend via USB cable or remotely). As it is linked to the power supply, it's possible to have access to all the modules connected to the power supply only if connected to the internet. It's needed a user key and a password to identify it on the remote server.

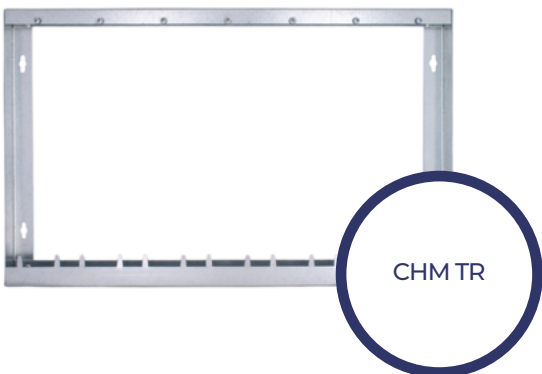
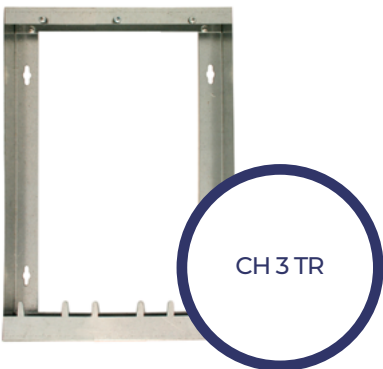
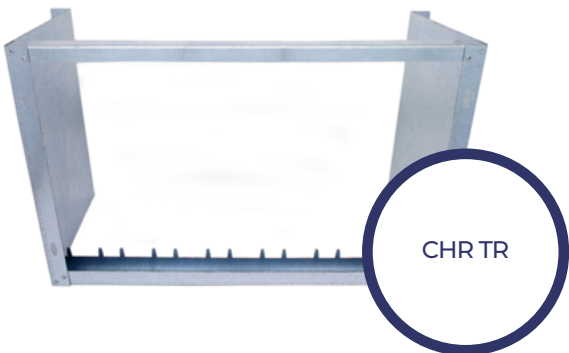


CM HEADEND

CM KEY

Remote management key

CH 3 TR · CHR TR · CHM TR



REFERENCE	CH3 TR	CHM TR	CHR TR
Code	220005	080005	080006
Description	Wall-mount 3 CM modules	Wall-mount 6 CM modules	19" rack 6 CM modules
Number of modules	2 + Power supply	6 + Power supply	6 + Power supply
Mounting	Wall	Wall	Rack 19"
Height in rack units	-	-	6 U
Measures	187x265x26 mm	427x265x26 mm	475x265x200 mm
Material	Galvanized steel	Galvanized steel	Galvanized steel



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