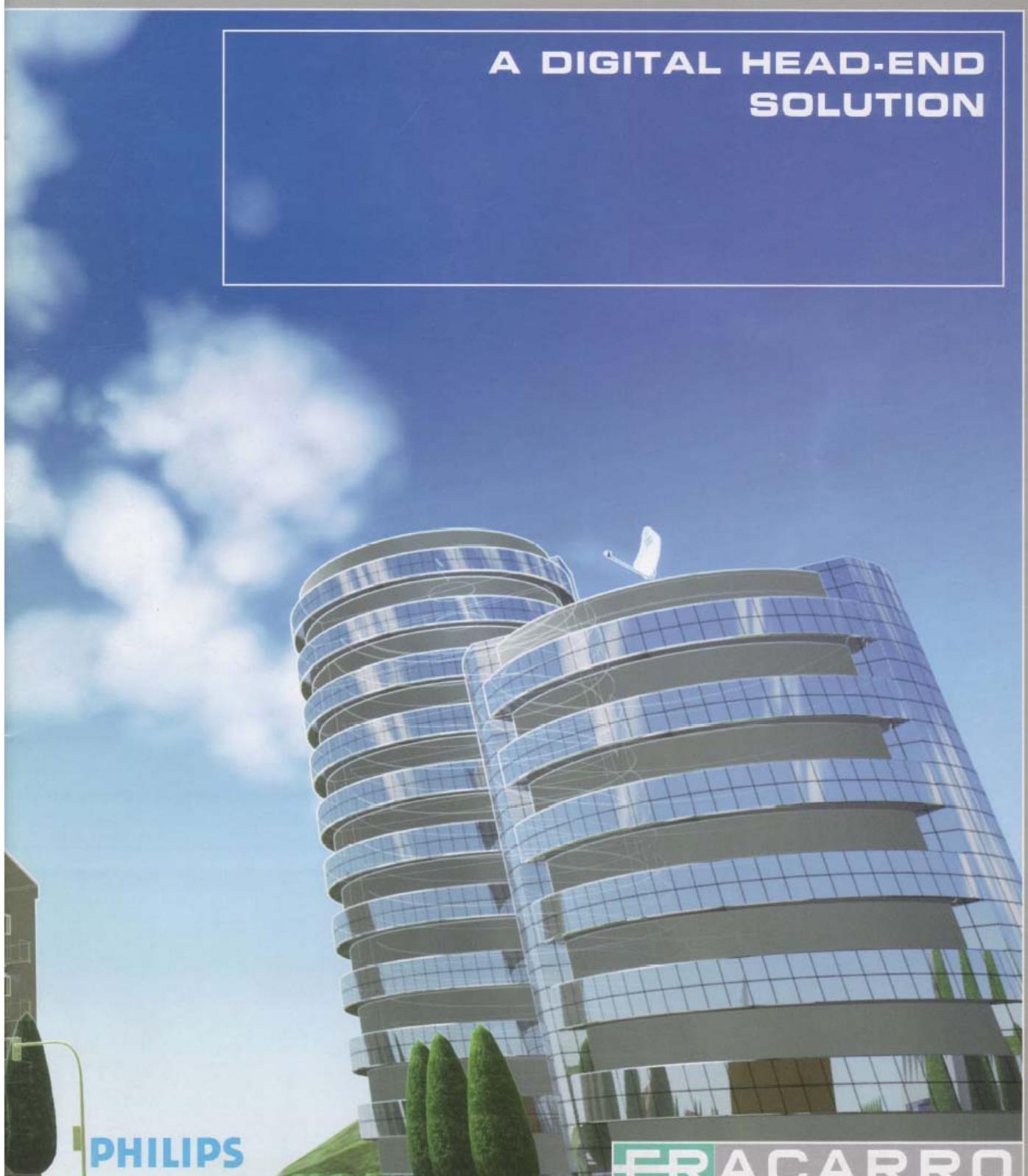


SEMI - MODULAR Head-ends  
for MATV and SMATV.

K SERIES

A DIGITAL HEAD-END  
SOLUTION



PHILIPS

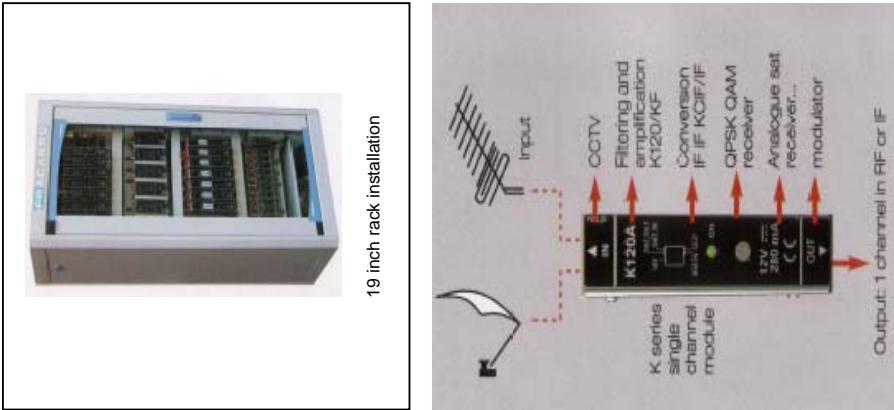
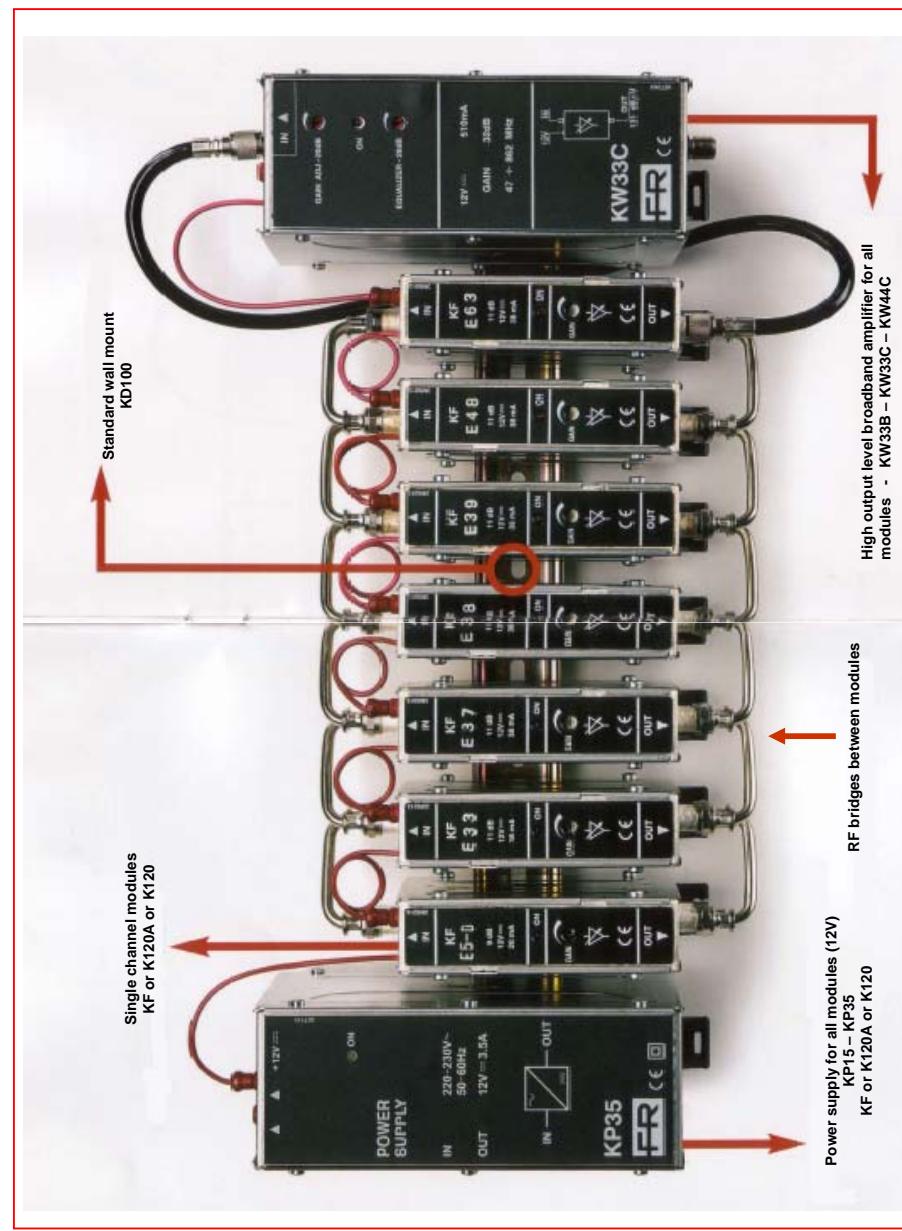
Philips SMATV is now Fracarro.

FRACARRO

shaping the future

## << The K Series system >>

# K SERIES



**K series** is designed to process digital and analogue signals in a SMATV system.  
**K series** is designed to be used in the following SMATV systems:

- Multi dwelling units
- Estates
- Hotels

## K SERIES : KEY POINTS

- Future proof solution
- Compliant with DIGITAL programs (DTT receiver)
- Ability to manage complex channel plans
- Flexible and time saving solution
- The KTP LCD programmer allows modules to be easily adjusted
- The modules can be fitted easily on the DIN BAR
- Reduce cost
- Uses standard din bar as wall mount rail
- Uses one broadband amplifier for all the modules (with KF range)

## << The number of the system >>

### Single channel amplifier

Item code	Gain dB	Selectivity				Max output level dBuV	Noise figure dB	Channels	Power consumption max mA
		PAn-2	PAn-1	PVn+2	PVn+2				
KF/...	9 (45)	35	5	9	35	93	7	E2 ÷ E4	20 @ 12V
	9 (45)	-	-	-	-	90	4	FM	20 @ 12V
	9 (45)	45	5	10	42	95	9	E5 ÷ E12	20 @ 12V
	7 (30)	40	5	10	40	95	10	S11 ÷ S20	20 @ 12V
	11 (35)	42	10	16	46	95	10	S21 ÷ S38	38 @ 12V
	11 (35)	42	10	16	46	95	10	E21 ÷ E69	38 @ 12V

Item code	Gain dB	Selectivity				Max output level dBuV	Noise figure dB	Channels	Power consumption max mA
		PAn-2	PAn-1	PVn+2	PVn+2				
K120/...	45 (40)	35	5	9	35	121	8	E2 ÷ E4	180 @ 12V
	40 (40)	-	-	-	-	112	5	FM	200 @ 12V
	45 (40)	40	5	10	44	120	9	E5 ÷ E12	2180 @ 12V
	45 (30)	35	5	10	40	120	10	S11 ÷ S20	200 @ 12V
	45 (30)	42	10	16	46	120	9	S21 ÷ S69	200 @ 12V

Item code	Max input level dBuV	Selectivity standard B7G Italia (1)		Output level adjustment dBuV	AGC dynamics (max) dB	Noise figure dB	Channels	Power consumption max mA
		PAn-2	PVn+1					
K120A/...	90	5	9	110 ÷ 120	25	8	E2 ÷ E4	210 @ 12V
	95	5	10	110 ÷ 120	30	9	E5 ÷ E12	210 @ 12V
	95	12	18	110 ÷ 120	30	10	E21 ÷ E69	210 @ 12V

### Amplifiers

Item code	Frequency range MHz		Gain (adjustment) dB	Max output level dBuV	Typ. Noise figure dB	Power consumption max mA
KW33B	47 ÷ 862		34 (20)	116	8	300 @ 12V
KW33C	47 ÷ 862		32 (20)	121	9	510 @ 12V
KW44C	47 ÷ 862		44 (20)	121	8	550 @ 12V
KW35E	5 ÷ 30 47 ÷ 862		35 (20)	125	9	830 @ 12V

### Power supplies

Item code	Mains Vac	Power consumption W	Output voltage V	Max current A	Dimensions mm
KP15	187 ÷ 264 Vac 50-60 Hz	23	12	1,5	40 x 130 x 86
KP35	187 ÷ 264 Vac 50-60 Hz	55	12	3,5	63 x 165 x 107
KP60	187 ÷ 264 Vac 50-60 Hz	92	12	6,0	63 x 165 x 133

### KDR TT Digital terrestrial transmodulator

Item code	Input DTT mode	Decoding	Audio	Output frequency	Output level	Output standard	Modulation	Current Consumption
KDR TT VH-CD	2K 8K	MPEG2	Mono	175-300 MHz	103dBV	Pal I/B/D/K Pal	DSB	720 mA
KDR TT UH-CD	2K 8K	MPEG2	Mono	470-860 MHz	105dBV	I/G/D/K	DSB	720 MA

#### KCP digital channel processor

Item code	Input frequency	Input signal	Processing	Output frequency	Output Level	Modulation	Power consumption
KCP	174-230 MHz & 470-862 MHz	Digital or Analogue	Double IF conversion	118-862 MHz	85 dBV	VSB	430 mA

#### KTLC headend remote control

Item code	Input GSM frequency	Output Protocol	Output Connector	Control of the KTLC	Microprocessor and Memory	Operating System	Power consumption
KTLC	900/1800 MHz	RS232	6 x RJ45 connectors to plug up to 12 devices	Interactive menu built-in	ARM7 Ram : 32 MB Flash memory : 8 MB	Linux	950 mA

#### KDTS QAM transmodulator

Item code	Input frequency	Input Symbol Rate	Output Frequency	Output Standard	Output level	Modulation	Power Consumption
KDTS/VL-C2	950-2150 MHz	1 Mbaud to 6.9 Mbaud	246-446 MHz	QAM 16 to QAM 128 according to input standard	90 dBV	VSB	550 mA

#### KCMX modulator

Item code	Standard	Audio input	Video input	Output frequency MHz	Output Channels	Output level dBuV	C/N channel N +/- 2 dB	Power Consumption max mA
KCMV	PAL B/G mono	500 mVrms/10k	1Vpp/75ohm	174 ÷ 382	E5 ÷ S30	90	66	350 @ 12V
KCMV/S	PAL B/G stereo	500 mVrms/10k	1Vpp/75ohm	174 ÷ 382	E5 ÷ S30	90	66	450 @ 12V
KCMV/M	Multistandard N H I D K L	500 mVrms/10k	1Vpp/75ohm	174 ÷ 382	E5 ÷ S30	90	66	350 @ 12V
KCMU	PAL B/G mono	500 mVrms/10k	1Vpp/75ohm	470 ÷ 862	E21 ÷ E69	90	65	330 @ 12V
KCMU/S	PAL B/G stereo	500 mVrms/10k	1Vpp/75ohm	470 ÷ 862	E21 ÷ E69	90	65	440 @ 12V
KCMU/M	Multistandard N H I D K L	500 mVrms/10k	1Vpp/75ohm	470 ÷ 862	E21 ÷ E69	90	65	330 @ 12V

#### KIF single IF channel convertor

Item code	Input frequency MHz	Output frequency MHz	Input level dBuV	Output level dBuV	Power Consumption max mA
KIF	950 ÷ 2150	950 ÷ 2150	47 ÷ 77	80 ÷ 95	280 @ 12V

#### KX125 IF amplifier

Item code	Input frequency MHz	Gain (adj) dB		Max output level dBuV	Typ. Noise figure dB	Power Consumption max mA
		950 MHz	2150 MHz			
KX125	950 ÷ 2150	38 (20)	44 (20)	125	6	310 @ 12V
	47 ÷ 862	-	-1	-	-	

#### Programming terminal

KTP	Equipped with a liquid crystal display comprising two lines of 16 characters and four keys. Allows the programming of all the parameters of the K series modules.
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