TECHNICAL CHARACTERISTICS

POWER CONSUMPTION	IFC/01	10
	IFC/5	58
	IFC/10	70
	IFC/20	88
	CC/01	15
	CC/5	63
	CC/10	75
	CC/20	93
OPERATING CONDITIONS	Temperature range	-5 ÷ 45 °C
	Relative humidity	max. 95%
WEIGHTS	IFC/01	10.5 Kg
	IFC/5, IFC/10, IFC/20	12.8 Kg
	CC/01	12.5 Kg
	CC/5, CC/10, CC/20	14.8 Kg
SIZE	Width	483 mm
	Heigth	133 mm
	Depth	400 mm
OPTIONS	24 Vdc or 48 Vdc battery/solar cells power supply	/VDC
	Up-converter local oscillator high frequency stability (<0.1 ppm)	HSF/IFC
	Down-converter local oscillator high frequency stability (<0.1 ppm)	HSF/CIF
	Precision Offset	OP/IFC

Features and specifications subject to change without notice.

DB Elettronica Telecomunicazioni SpA
Via Lisbona, 38 - 35127 Padova - Italy
Tel +39 049 8700588 - Fax +39 049 8700747
sales@dbbroadcast.com - www.dbbroadcast.com

IF to Channel TV Converters
Channel to Channel TV Transposers

IFC Series / CC Series

IF to Channel TV Converters
Channel to Channel TV Transposers

IFC Series / CC Series

- **General.** The IFC Series TV converters are used to convert a modulated IF Television signal to an RF channel in the I, III and IV/V band.
  The combination of an IFC converter with a high performances Video IF modulator (for example the VAM 01/DV) allows to obtain an excellent quality TV low power compact transmitter (up to 20 Wps) suitable to be also used as exciter for higher power transmitters.
  The CC Series TV transposers are used to transpose a modulated RF Television channel to another one in the I, III and IV/V band. The CC Series transposers can work as stand-alone compact repeaters (up to 20 Wps) or as exciters for higher power repeaters.
- **Multistandard.** The IFC converters and CC transposers are fully compatible with all the international television standards.
- **Digital compatible.** The IFC converters and CC transposers are fully compatible with analog or digital TV signals.
- **Synthesized.** The input/output RF channels can be easily set by an agile dip-switch selector or (optional) by a front panel digital display.
- **Broadband.** To change the RF operating channels it's simply necessary to select the proper dip-switches or display frequency configuration and easily retune the correspondent channel filter. All the other parts are fully broadband and don't need any retuning.
- **Precision AGC.** An internal wide range AGC circuit guarantee high stability of RF output signal level.
- **Linearity built-in precorrector.** A powerful linearity precorrector circuit allows to optimize the output modulation characteristics also when the IFC and CC Series converters/transposers are used as driver for high power amplifiers.
- **Stereo/dual sound and NICAM compatible.** The RF bandwidth of the IFC and CC Series converters/transposers allows mono, stereo, dual sound or NICAM digital audio operation.
- **Offset.** All IFC and CC Series converters/transposers can be configured for international standard (CCIR, FCC, etc...) offset operation. High precision offset configuration, with 1 Hz or 0.999000999 Hz minimum step, is available as option.
- **Modular assembly.** For easy maintenance all circuits are built-up in easily interchangeable plug-in modules.
- **Solar cells/battery.** 24/48 Vdc power supply option is available for battery or solar cells operation.
- **Meets or exceeds** all the international standards for safety and electrical specifications.

RF CONVERTER MODULE

MODULAR ASSEMBLY

TECHNICAL CHARACTERISTICS

IF INPUT (IFC SERIES)	Input signal	IF
	Input frequency	depending on video standard
	Input signal level	-7 dBm ±3 dB
	Input impedance	50 Ω
	Input connector	SMB (others upon request)
	Input return loss	> 26 dB
RF INPUT (CC SERIES)	Input frequency	all channels in Band I, III, IV and V
	Input impedance	50 Ω
	Input connector	N type
	Input return loss	> 26 dB
	Input signal level	250 µV ÷ 20 mV
	AGC input dynamic range	≥ 38 dB
	Noise figure	≤ 8 KTo
RF OUTPUT (IFC SERIES AND CC SERIES)	Output impedance	50 Ω
	Output connector	N type
	Output frequencies:	
	IFCI, CCI	45 ÷ 90 MHz (band I)
	IFCV, CCV	174 ÷ 230 MHz (band III)
	IFCU, CCU	470-860 MHz (band IV/V)
	Output return loss	> 24 dB
	Output power level versus input voltage variation 0.25 ÷ 20 mV (CC Series)	< 0.5 dB
	Output power level versus input voltage variation ΔVin = ±3 dB (IFC Series)	< 0.3 dB
	Output power (peak sync.):	
	-IFC/01, CC/01	10 mWps
	-IFC/5, CC/5	5 Wps
	-IFC/10, CC/10	10 Wps
	-IFC/20, CC/20	20 Wps
	Frequency response (Fv - 0.75 MHz / Fs + 0.25 MHz)	± 0.5 dB
	Intermodulation distorsion (IMD-DIN 45004 –8, -16, -10 dB)	< -62dBc
METERING	Forward power, received level (only CC Series), power supply voltages, alarms.	
POWER SUPPLY CHARACTERISTICS	Mains power supply	115/230 Vac ±15%, 47 to 62 Hz single phase
	Battery/solar cells power supply (option)	24 Vdc or 48 Vdc