

**CW-3041 FM CONVERTER**  
**CW-3042 FM CONVERTER**

with CCIR FM band output

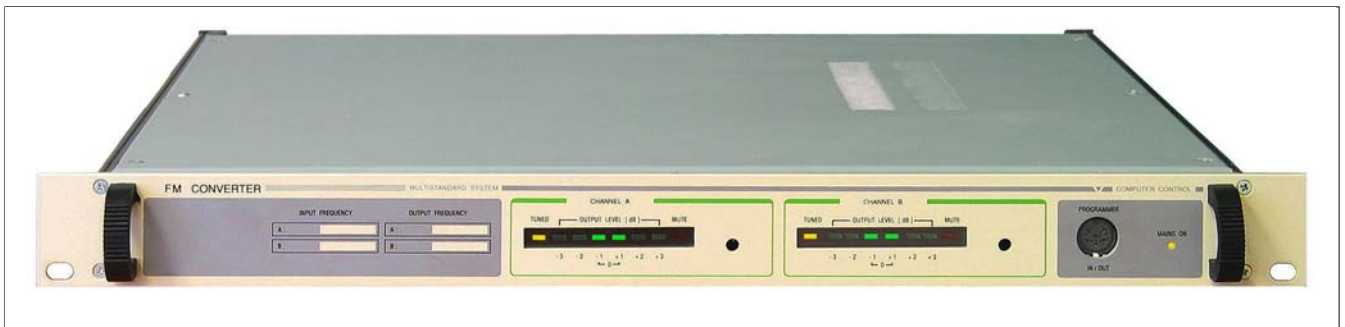
with OIRT FM band output

*Providing high quality stereo radio programs is becoming more and more demanded in cable TV systems. The CW-304x FM CONVERTER is used to supply terrestrial FM radio programs to the subscribers through the cable TV network.*

*The unit processes the signals of two independent FM channels simultaneously, in excellent quality.*

*Both the input and output frequencies can be set by programming, and can easily be changed at any time.*

*The settings and the operation modes can be checked by front panel indicators.*

**Main features:**

- Reception of both the OIRT and the CCIR FM band
- Processing of two independent stereo programs
- Conversion through MPX signal
- The unit is equipped with directional couplers at both the input and the output side
- Free programmable input and output frequency
- Operational parameters displayed on front panel LEDs

## Technical data

## FM standard

Modulation	FM
Output frequency band	
CW-3041	CCIR 87.5 -108 MHz
CW-3042	OIRT 66.0 - 73 MHz

## Transmission characteristics

Output signal	the input signal, modulated through MPX signal to a new carrier frequency
Nominal IF bandwidth	200 kHz
Mirror selectivity	min. 60 dB
Adjacent channel suppression	min. 30 dB at $\pm 300$ kHz
Nominal frequency deviation	75 kHz
Modulation distortion	max. 0.5 %
Signal to noise ratio	min. 60 dB between 50 Hz and 15 kHz
Stereo crosstalk	max. -30 dB

## Input data

Receiving frequency range	66 - 108 MHz
Nominal input level	
channel Ch1	20 - 90 dB $\mu$ V
channel Ch2 (through the internal 12 dB input directional coupler)	30 - 100 dB $\mu$ V
Nominal input impedance	75 $\Omega$
Sensitivity for 26 dB S/N	better than 2.5 dB $\mu$ V (measured in Ch1, CCIR band)

## Output data

Frequency setting	by programming
Frequency accuracy	min. $1 \times 10^{-4}$
Combining of the output signals	75 $\Omega$ directional coupler within the unit
Nominal output level	100 dB $\mu$ V (100 mVeff)
- stability	better than $\pm 1$ dB
Harmonic amplitude	max. -50 dB
Other products	max. -60 dB

## Programmable parameters

(with CW-3081 PROGRAMMER)

Receiving frequency	
- raster	10 kHz
Output frequency	
- raster	10 kHz
Output level	
- variable range	$\pm 3$ dB, in steps of approx. 1 dB
Muting	on / off
Muting level	3 ... 200 $\mu$ V variable in 6 steps with Muting On

## General data

Service period	continuous
Mains voltage	230 V, -10 % ... +15 %, 50/60 Hz
Power consumption	50 VA
Type of the connectors	
- RF input and output	F socket
Physical dimensions	19" $\times$ 1 module
- Width	483.0 mm
- Height	43.6 mm
- Depth	473.0 mm
Mass	3 kg
Operational temperature range	
- to fulfil the specifications	+10 ... +35 $^{\circ}$ C
- to maintain operation	0 ... +40 $^{\circ}$ C
Storage temperature	- 25 ... +45 $^{\circ}$ C

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