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**LOW POWER TV  
TRANSMITTERS  
AND  
TRANSPOSERS**



## PRINCIPALI CARATTERISTICHE:

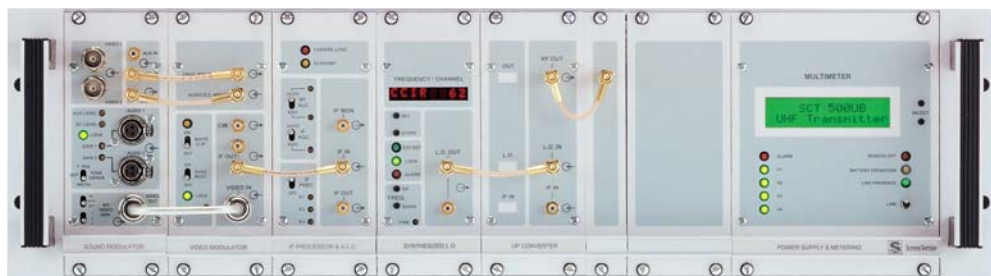
- > Costruzione modulare.
- > Raffreddamento forzato.
- > Controlli A.G.C. e A.L.C.
- > Precorrezione di linearità a 3 pendenze.
- > Eccellente figura di rumore.
- > Tecnologia LDMOS nelle versioni UHF.
- > Digital ready.
- > Cambio del canale dal pannello frontale (opzionale).
- > Predisposto per OFFSET di precisione.
- > Display digitale multifunzione.
- > Circuito di "soft-start".
- > Basso consumo.
- > Circuito di "economy" in assenza di segnale d'ingresso.
- > Filtro vestigiale di tipo S.A.W.
- > Power limiter incorporato.
- > Rigenerazione dei sincronismi (SCT).
- > Limitatore automatico del livello del bianco e dei sincronismi (SCT).
- > Modulatore multi-standard (SCT).
- > Disponibile in versione stereo/dual sound.

## MAIN FEATURES:

- > Modular construction.
- > Forced air cooling.
- > AGC and ALC controls.
- > 3-slope linearity pre-correction.
- > Excellent noise figure.
- > LDMOS technology in UHF versions.
- > Digital ready.
- > Channel change from front panel (optional).
- > Pre-set for precision OFFSET.
- > Multifunction digital display.
- > Soft start circuit.
- > Low power consumption.
- > Economy circuit in case of input signal lack.
- > SAW vestigial filter.
- > Incorporated power limiter.
- > Sync restore (SCT).
- > Automatic white level and sync limiter (SCT).
- > Multistandard modulator (SCT).
- > Available in stereo/dual sound version.

## CARACTERÍSTICAS PRINCIPALES:

- > Construcción modular.
- > Ventilación forzada.
- > Controles A.G.C. y A.L.C.
- > Precorrección de linealidad de 3 pendientes.
- > Excelente figura de ruido.
- > Tecnología LDMOS en versiones UHF.
- > Digital ready.
- > Cambio de canal desde el panel frontal (opcional).
- > Configurado para OFFSET de precisión.
- > Display digital multifunciones.
- > Circuito de "soft-start".
- > Bajo Consumo.
- > Circuito de "economy" en ausencia de señal de entrada.
- > Filtro vestigial de tipo S.A.W.
- > Limitador de potencia integrado.
- > Regeneración de sincronismos (SCT).
- > Limitador automático del nivel del blanco y de los sincronismos (SCT).
- > Modulador multi-estándar (SCT).
- > Disponible en versión estéreo/audio dual.



SCT 500UB 50 W UHF TRANSMITTER



SCT 201UB-C 250 W UHF TRANSMITTER



SCT 201UB-C/S 250 W UHF TRANSMITTER STEREO VERSION



SCR 201UB-C 250 W UHF TRANSPOSER

Questa serie di prodotti è composta da trasmettitori e ripetitori completamente a stato solido progettati per garantire la rispondenza ai principali standard internazionali.

Un'ampia gamma di versioni e configurazioni permette al cliente di scegliere il trasmettitore adeguato alle proprie esigenze.

La serie comprende apparati da 50 a 650 W di potenza d'uscita nominale, per le bande VHF I, VHF III e UHF, da utilizzare come stadi pilota per amplificatori di potenza superiore o per alimentare direttamente sistemi d'antenna.

Gli apparati sono disponibili per i vari sistemi televisivi e completamente modulari; la conversione da

trasmettitore a ripetitore e viceversa, ad esempio, si effettua semplicemente sostituendo due moduli "plug-in".

L'eccellente linearità degli amplificatori a larga banda consente un "de-rating" estremamente contenuto quando i ripetitori vengono utilizzati con segnali digitali.

I dispositivi di raffreddamento sovra-dimensionati ed una serie di circuiti di controllo e protezione gestiti da microprocessore garantiscono un'elevata affidabilità nel tempo.

Un display multifunzione permette di verificare tutti i parametri di funzionamento dell'apparato.

**MODEL-SPECIFIC DATA**

Model	Output band	Output connector	Working class	Dimensions	Nominal analog output power (p.s.)	Digital output power (rms) without filter (Shoulders -36 dB @ F <sub>0</sub> ± 4.3 MHz)	
						DVB-T	ATSC
SCT, SCR*						-	-
101FB-C	VHF I	N	AB	4 RU	150 W	-	-
101FB	VHF I	N	AB	3+3 RU	150 W	40 W	60 W
201FB-C	VHF I	N	AB	4 RU	300 W	-	-
201FB	VHF I	N	AB	3+4 RU	300 W	80 W	100 W
501FB	VHF I	7/16	AB	3+5 RU	650 W	160 W	200 W
500TB	VHF III	N	AB	3 RU	50 W	-	-
101TB-C	VHF III	N	AB	4 RU	150 W	-	-
101TB	VHF III	N	AB	3+3 RU	150 W	40 W	60 W
201TB-C	VHF III	N	AB	5 RU	300 W	-	-
201TB	VHF III	N	AB	3+4 RU	300 W	80 W	100 W
501TB	VHF III	7/16	AB	3+5 RU	650 W	160 W	200 W
500UA-C	UHF	N	A	4 RU	50 W	-	-
500UA	UHF	N	A	3+3 RU	50 W	20 W	30 W
500UB	UHF	N	AB	3 RU	50 W	-	-
101UB-C	UHF	N	AB	4 RU	150 W	-	-
101UB	UHF	N	AB	3+3 RU	150 W	40 W	60 W
201UB-C	UHF	N	AB	4 RU	250 W	-	-
201UB	UHF	N	AB	3+3 RU	250 W	65 W	100 W
501UB	UHF	7/16	AB	3+4 RU	500 W	125 W	200 W

\* SCT Series = analog transmitters  
SCR Series = transposers

Specifications and characteristics are subject to change without notice.



**SCT 501TB 650 W  
VHF TRANSMITTER**



**SCT 501UB 500 W  
UHF TRANSMITTER**



**SCT 101UB 150 W  
UHF TRANSMITTER**

*This series of products consists of fully solid-state transmitters and transposers designed to guarantee compliance with main international standards.*

*A broad range of versions and configurations enables the customer to choose the right transmitter for his personal needs. The series includes equipment of 50 to 650 W nominal output power for the VHF I, VHF III and UHF bands, to be used as driver stages for amplifiers of greater power or for directly powering antenna systems.*

*The units are available for the various television systems and are fully modular. The conversion from transmitter to transposer and vice versa, for example, is accomplished by simply changing two plug-in modules.*

*Excellent linearity of the broadband amplifiers allows extremely limited de-rating when transposers are used with digital signals.*

*The oversized cooling devices and a set of microprocessor-operated control and protection units guarantee substantial lasting reliability.*

*A multifunction display makes it possible to verify all operating parameters of the unit.*

Forman esta serie de productos unos transmisores y repetidores totalmente en estado sólido, concebidos de manera tal que garantizan su respuesta a los principales estándares internacionales.

Una amplia gama de versiones y configuraciones permite que el cliente pueda elegir el transmisor que cumpla con sus propias exigencias. La serie incluye aparatos de 50 hasta 650 Vatios de potencia nominal en salida, para bandas VHF I, VHF III y UHF, a utilizar como etapas piloto para amplificadores de potencia superior o para alimentar directamente sistemas de antena.

Los aparatos están disponibles para los distintos sistemas televisivos y completamente modulares. Por ejemplo, la conversión de transmisor a repetidor y viceversa se lleva a cabo simplemente sustituyendo dos módulos "plug-in".

La excelente linealidad de los amplificadores de banda ancha permite un "de-rating" sumamente reducido cuando los repetidores se utilizan con señales digitales.

Los dispositivos de refrigeración sobredimensionados y una serie de circuitos de control y protección, gestionados por microprocesador, garantizan gran confiabilidad al correr del tiempo. Un visualizador multifunciones permite verificar todos los parámetros de funcionamiento del aparato.



**SCT 201UB-C REAR VIEW**



**SCT 501UB REAR VIEW**

# LOW POWER TV TRANSMITTERS AND TRANSPOSERS

ANALOG

## TECHNICAL CHARACTERISTICS

### TRANSMITTER VERSION

#### VIDEO PARAMETERS

Number of inputs	2 (mono version), 1 (stereo version)
Input impedance	75 $\Omega$
Input level	1 V p.p. $\pm 3$ dB
White / Sync level limiter	95%
2T K factor	< 1.5%
Amplitude / frequency response	$\pm 0.5$ dB (throughout the vision band)
Differential gain	< 5%
Differential phase	< 3°
Tilt (50 Hz)	< 2%
Tilt (15 kHz)	< 2%
Group delay	$\pm 35$ ns (throughout the vision band)
Vestigial side-band filter	SAW for all standards
Sync pulse compression	< 3%
S/N ratio (weighted)	> 60 dB
ICPM	< 3°
Luminance non linearity	< 4%
Field time bar tilt	< 2%
Line time bar tilt	< 2%

#### AUDIO PARAMETERS

Number of inputs	2
Input impedance (balanced)	600 $\Omega$ or > 5 k $\Omega$ , selectable
Input level	0 dBm $\pm 6$ dB
Carrier level	-10 dB (adjustable)
Modulation capability	$\pm 120$ kHz
Frequency response (30 Hz to 15 kHz)	$\pm 0.4$ dB
T.H.D. (30 Hz to 15 kHz)	< 0.4%
Pre-emphasis	50 $\mu$ s or 75 $\mu$ s or flat
S/N ratio (un-weighted)	> 60 dB
Sound transmission	Dual sound coding to IRT or FM single sound and NICAM 728 (-13, -20 dB) or FM single sound
Stereo / Dual sound option	Available
Stereo separation (equivalent)	Better than -55 dB (typ.)

### TRANSPOSER VERSION

Input frequency bands	VHF I, VHF III, UHF (agile)
Input impedance	50 $\Omega$
Input matching	> 26 dB
Input level amplitude	-30 to -75 dBm
A.G.C. + A.L.C. dynamic	> 45 dB
Noise figure	< 5 dB (typ.)

### GENERAL

Available standards	B, D, G, H, I, K, M, N
Colour system	PAL, NTSC, SECAM
Output impedance	50 $\Omega$
Protections	Overpower Adjustable exciter power limiter VSWR Overvoltage Overcurrent Overtemperature RF fold-back on HI-VSWR (optional)
Frequency stability	1 ppm (optional $1 \times 10^{-10}$ /day, $3 \times 10^{-9}$ /year)
External reference frequency input	5 MHz or 10 MHz
Offset steps (optional)	1 Hz (CCIR), 0.999000999 Hz (FCC)
I.M.D. at rated output power	better than -57 dBc (-60 dBc typical)
Harmonics (with output filter)	-60 dB or better
Spurious emissions (with output filter)	-60 dB or better
External control and monitoring interfaces	logic and analog signal outputs, enable input, RS 485 TCP/IP (optional) SNMP (optional)
Cooling	Forced air
Operating temperature	-10°C to +45°C
Maximum relative humidity	90%, non condensing
Maximum operating altitude	2500 m a.s.l. (> 2500 m on request)
Mains power supply	90 to 264 V AC, 48 V DC or 90-135 V AC or 185-264 V AC (according to the model)



## Screen Service

SCREEN SERVICE

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