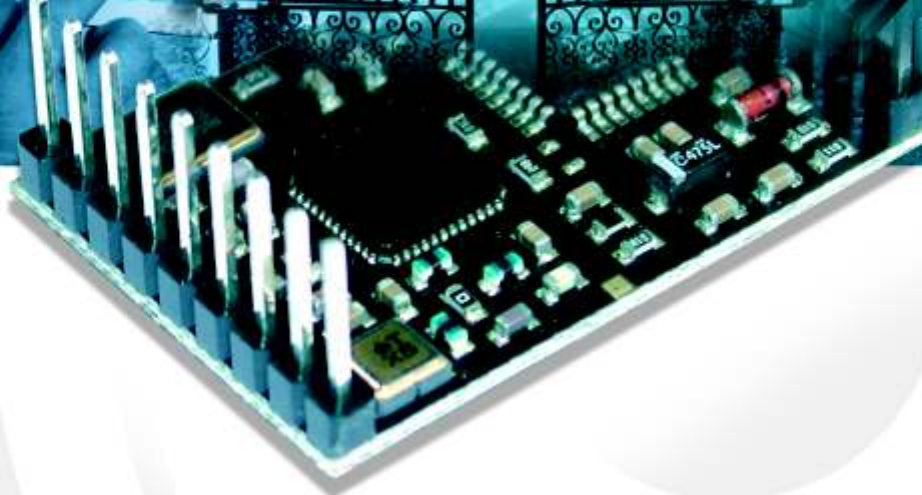




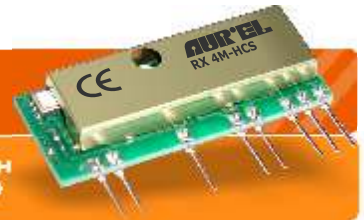
08



*Wireless experience*  
Radiofrequency modules for wireless transmission

# RX RECEIVERS

Gate door openers, burglar alarms, home security, remote controls



MODEL Part number	AM	FM	Frequency (Mhz)	Supply (V)	Current (mA)	Sensitivity (dBm)	R.F. Band (KHz)	Bit rate (Bps)	LxWxH (mm)	
BC-NBK <sup>(1)</sup> 650200208G	●		433.92	+5	2.7	- 103	± 1200	2400	38 x 13.7 x 5.5	Low Cost Receiver
AC-RX/AC-RX2 <sup>(1)</sup> 650200473G/884G	●		433.92	+5	2.5	- 106	± 2000	2400	38 x 12.3 x 5.5	Low Cost Receiver
RX-4M30RR01SF <sup>(1)</sup> 650200590G	●		433.92	+3	0.07	- 100	600 SAW Filter	2400	40 x 17.5 x 5.5	Low consumption 2.5V version available
RX-4M50RR30SF <sup>(1)</sup> 650200527G	●		433.92	+5	3	- 106	600 SAW Filter	2400	40 x 17.5 x 5.5	High performance
RX-4MHCS <sup>(1)(*)</sup> 650200997G	●		433.92	+5	3	- 106	150	2400	39 x 17.5 x 5	HCS decoder embedded
RX-AM4SF <sup>(1)</sup> 650200701G	●		433.92	+5	6.5	- 109	600 SAW 280 IF Ceramic	2400	40.3 x 17.5 x 5	RSSI Super-het
RX-4MM5 <sup>(1)</sup> 650200821G	●		433.92	+5	5.8	- 114	280 IF Ceramic	2400	39 x 17.5 x 5	High sensitivity super-het 3V version available
RX-4MM5++ 650200972G	●		433.92	+5	5.8	- 114	600 SAW 280 IF Ceramic	2400	36 x 15 x 4	SAW filtered EMI CLASS 1 3V available
RX MID 3V <sup>(1)</sup> 650201034G	●		433.92	+3	5.6	- 111	400	2400	25.4 x 12.4 x 2.5	Very small size 5V available
RX-4M50FM60SF 650200605G		●	433.92	+5	6	- 111	600 SAW 70 IF CER	19200	44.9 x 17.5 x 9.3	Super-Het High sensitivity
RX-4MF1 650200855G		●	433.92	+5	6	- 108	600 SAW 70 IF CER	19200	40 x 17.4 x 5.5	Super-Het Low cost Auto Squelch
RX-AM8SF <sup>(1)</sup> 650200797G	●		868.30	+5	6.5	- 108	600 SAW 280 IF CER	2400	40.3 x 17.5 x 5.3	RSSI High Sensitivity
RX-8L50FM70SF 650200636G		●	868.30	+5	7	- 107	600 SAW filter	9600	44.9 x 17.5 x 9.3	Super-Het High sensitivity



(1) 100% modulazione RF / RF generator with 100% modulation.

(\*) Compatible only with HCS keyfobs programmed with AUREL manufacturer code.

# TX HYBRID TXs

Gate door openers, burglar alarms, home security, remote controls



MODEL Part number	AM	FM	Frequency (Mhz)	Supply (V)	Current (mA)	Out Power (mW)	Bit rate (Bps)	LxWxH (mm)	
TX-4MDIL 650200738G	●		433.92	+3÷5	3÷6	1.5	9600	17.8 x 10.16 x 2	Mini Tx DIL
TX-4MSIL 650200737G	●		433.92	+3÷5	3÷6	2÷4	9600	17.8 x 12.4 x 2	Mini Tx SIL
TX-SAW MID 3V 650200798G	●		433.92	1.8÷3.5	3÷7	10	9600	28 x 12.5 x 3	Ideal for long battery life 5V version available
TX-SAW 433 s/Z RFM 650200689G	●		433.92	+5	4	10	9600	38.1 x 13.2 x 3	Low cost Tx
TX-4M10HA 650200819G	●		433.92	+3	25	10 (ERP)	9600	56 x 18.5 x 10	High power Integrated antenna Vertical pin available
TX-FM-MID 650200926G		●	433.92	+3	11÷16	10	9600	25.4 x 12.5 x 3	Enable pin version available
TX-8LAVSA05 650200546G	●		868.30	+2.7÷5	20÷50	5	9600	38.1 x 13.7 x 3	Low cost Integrated antenna available
TX-8L25IA 650200846G	●		868.30	+3	25	25 (ERP)	9600	56 x 18.5 x 5	High power Integrated antenna Horiz./Vert. versions
TX-8L50PF06 650200653G		●	868.30	+5	24	6	9600	39 x 17.5 x 5	High performance 3V version available

# KF

## KEYFOB TXs Gate door openers, burglar alarms, home security, remote controls



MODEL Part number	AM	FM	Frequency (Mhz)	Supply (V)	Current (mA)	E.R.P. (mW)	Encoder (type)	Channels (buttons)	LxWxDH (mm)	
TX-1/2TK-SAW433 650200134G/135G	●		433.92	+12	10	1	145026	1/2	65.5 x 37 x 15	
TX12E-1/2TK SAW433 650201000G/1001G	●		433.92	+12	10	1	HT12E 3750 comp.	1/2	65.5 x 37 x 15	
HCS-TX-1/2/3 650200609G/610G/606G 650200693G/683G/684G (AUREL CODE)	●		433.92	+3	10	0.5	HCS300	1/2/3	54 x 43 x 11	
TX1/2/3-HCS-433 650200569G/571G/568G 650200765G/808G/759G (AUREL CODE)	●		433.92	+12	10	0.5	HCS301 Available HCS360	1/2/3	56.5 x 36 x 14	
TX12E-1/2/4 C-SAW433 650200919G/918G/917G	●		433.92	+12	7	1	HT12E 3750 comp.	1/2/4	75 x 43.5 x 18.5	
TX-1/2/4 C-5026 650200463G/444G/462G	●		433.92	+12	10	1	145026	1/2/4	75 x 43.5 x 18.5	
TX12E-1/2/4 E-SAW433 650200922G/921G/920G	●		433.92	+12	7	1	HT12E 3750 comp.	1/2/4	80 x 43.5 x 18.5	
TX-2/4/6 M-HCS 650200805G/806G/807G 650200900G/901G/828G (AUREL CODE)	●		433.92	+12	7	1	HCS301	2/4/6	75 x 43.5 x 18.5	
TX-12 CH 650200487G 650200902G (AUREL CODE)	●		433.92	+6	10	0.5	HCS301	12	85.5 x 54 x 10.5	
HCS-FM-TX 1/2/3 650200611G/612G/613G 650200903G/791G/904G (AUREL CODE)		●	433.92	+3	10	0.5	HCS300	1/2/3	54 x 43 x 11	
HCS-TX 1/2/3-868 650200741G/654G/648G 650200910G/714G/891G (AUREL)	●		868.30	+3	10	1	HCS300	1/2/3	54 x 43 x 11	
HCS-FM-TX 1/2/3-868 650200745G/649G/647G 650200864G/863G/862G (AUREL CODE)		●	868.30	+3	10	0.5	HCS300	1/2/3	54 x 43 x 11	

N.B. I trasmettitori con HCS vengono forniti NON programmati - Per elevate quantità AUREL puo' programmarli in accordo con le specifiche richieste

N.B. By default all HCS keyfobs are supplied NO programmed - For convenient quantity AUREL is willing to program them according to customers own parameters.

# AUDIO

## 2.4 Ghz Wireless speakers, Home theatre, headphone



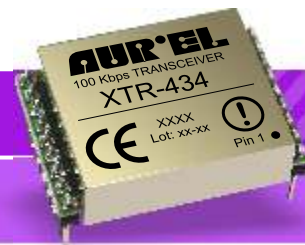
MODEL Part number	AM	FM	Frequency (Mhz)	Supply (V)	Current (mA)	TX Power (mW)	Channels (N)	LxWxDH (mm)	
RX-AUDIO-2.4 6502010005G		●	2400 ÷ 2483.5	+5	65		8	47 x 32 x 7	High Fidelity CD quality Analogic Output
TX-AUDIO-2.4 650201004G		●	2400 ÷ 2483.5	+3.6÷5	93	+10 dBm	8	52 x 16 x 7	High Fidelity CD quality Analogic Input



# RTX

## SINGLE CHANNEL

Telemetry, home automation, remote meter reading



MODEL Part number	AM	FM	Frequency (MHz)	Supply (V)	Current (mA)	Sensitivity (dBm)	TX Power (mW)	Max Bit rate (bps)	LxWxH (mm)	
RTF-DATA-SAW <sup>(1)</sup> 650200218G	●		433.92	+5	Tx 4.5 Rx 2.5	-96	10	9600	63.5 x 17.9 x 5	Low Cost
RTX-RT LP 434 <sup>(1)</sup> 650200589G	●		433.92	+3	Rx 0.08	-99	10	2400	63.3 x 17.2 x 5	Low Consumption
RTX MID 3V <sup>(1)</sup> 650201033G	●		433.92	+3	15 Tx On 7 Rx On 0.01 En Off	-110	10	9600	25.4 x 12.4 x 2.5	High Sensitivity Very small size
XTR-434 <sup>(1)(2)</sup> 650200588G		●	433.92	+5	28 Tx On 11 Rx On 0.1 All Off	-100	10	100.000	33 x 23 x 8	High speed 433.42 MHz available
XTR-434L <sup>(1)(3)</sup> 650200614G		●	433.92	+5	28 Tx On 11 Rx On 0.1 All Off	-103	10	50.000	33 x 23 x 8	High sensitivity
XTR-869 <sup>(1)(3)</sup> 650200624G		●	869.85	+5	28 Tx On 11 Rx On 0.1 All Off	-100	5	100.000	33 x 23 x 8	High speed
WIZ-434-RS 650200615G		●	433.92	+9÷15	30	-100	10	115.200	65 x 125 x 20	Integrated antenna Open frame Plastic enclosure available
WIZ-434-SML IA 5V 650200626G		●	433.92	+5	30	-100	3	115.200	37 x 93 x 20	RS-232 Adapter available Integrated antenna 12V version available
WIZ-869-TRS 650200705G		●	869.85	+5	13 Rx On 29 Tx On	-100	3	38.400	68 x 40 x 10	RS-232 Adapter available Integrated antenna



(1) 100% modulazione RF / RF generator with 100% modulation  
 (2) Bit rate min. 9600 bps  
 (3) Bit rate min. 2400 bps  
 (\*) Needs Manchester balanced code / Richiede codifica Manchester

# RTX

## MULTI CHANNEL

Industrial automation, radio modem, access control



MODEL Part number	AM	FM	Frequency (Mhz)	Supply (V)	Current (mA)	TX Power (mW)	Bit rate (Bps)	LxWxH (mm)	
XTR-7020 A-4 650200925G		●	433÷434	+3	30 RX ON 40 TX ON 0.08 OFF	Min 0.15 Max 10	MAX 115.200	33 x 23 x 8	Microcontrolled embedded 10 Channels
XTR-7020 A-8 650200998G		●	868÷870	+3	30 RX ON 40 TX ON 0.08 OFF	Min 0.15 Max 10	115.200	33 x 23 x 8	Microcontrolled embedded 7 Channels
WIZ-7020 A-4 650200960G		●	433÷434	+5	30 RX ON 40 TX ON 0.08 OFF	Min 0.1 Max 3 (E.R.P.)	115.200	68 x 40 x 10	Integrated antenna 10 Channels RS-232 Adapter available
WIZ-7020 A-8 650200999G		●	868 ÷ 870	+5	30 RX ON 40 TX ON 0.08 OFF	Min 0.1 Max 3 (E.R.P.)	115.200	68 x 40 x 10	Integrated antenna RS-232 adapter avail. 10 Channels
XTR-CYP 2.4 <sup>(*)</sup> 650200915G		SDDD	2402 ÷ 2481	+3.3	60 RX ON 100 TX ON	Min 0.04 Max 30 (E.R.P.)	64.000	35 x 25	Data Transceiver 78 Channels
XTR VF 2.4 LP <sup>(*)</sup> 650201025G		SDDD	2402 ÷ 2497	1.8 ÷ 3	21 RX ON 35 TX ON 0.08 ST-BY	Min 0.03 Max 3 (E.R.P.)	1M	35 x 25	Data Transceiver 98 Channels



(\*) DEMOBOARD CYP AVAILABLE (P.N. 650200999G)



I prodotti AUREL sono disponibili in aderenza alla Direttiva Europea RoHS/WEEE.

Tali prodotti sono identificati da un codice esteso con lettera G - (es: 650200473G)

AUREL products are available in compliance to RoHS/WEEE European Directives.

The products are identified with a - G - letter added to code number (ex: 650200473G)

# ANT

## ANTENNAS

Industrial automation, radio modem, access control



MODEL Part number	Frequency (MHz)	Impedance (Ω)	Case	LxWxH (mm)	
AS433 / AS868 650200596G/597G	430÷440 860÷870	50	Black PVC	34 x 175	Vertical
GP433/GP868 650200313G/599G	430÷440 860÷870	50	Aluminium & Chromium Plated Brass	190 x 460	Ground Plane
T/T8 650200442G/607G	430÷440 860÷870	50	Black rubber	10 x 90	Flexible stylus
T-A/T8-A 650200448G/608G	430÷440 860÷870	50	Black rubber	10 x 90	Flexible stylus
A24 650200740G	2200÷2600		White PVC	188 x 133 x 40	High Gain Antenna +10 dBi



# DEC

## DECODERS

Burglar alarms, home security, remote controls



MODEL Part number	Supply (V)	Current (mA)	Decoder (mm)(type)	Encoder (type)	Clock (KHz)	LxWxH	
D1MB 650200012G	+5÷15	1 quiescent	145028	145026	1.7	40 x 16.8 x 3.5	Single channel
D2MB 650200011G	+5÷15	1 quiescent	145027	145026	1.7	51.2 x 16 x 4.3	Dual channels
D4ML 650200450G	+5÷15	1 quiescent	HT12D	86409	1	51.2 x 18.8 x 4.3	Four channels
HCS-DEC 4 (*) 650200994G	12 DC 24 AC	66 ON 20 Stand by	µP	HCS301		65 x 45 x 18	Available with 1/2/4 outputs



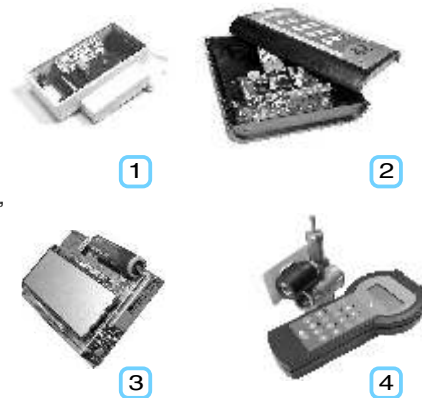
(\*) Compatible only with HCS keyfobs programmed with AUREL manufacturer code.

## Custom solutions

AUREL is specialized in custom production and relative projecting, adapting it to individual customer request.

### Example applications

- (1) Magnetic sensors for intrusion alarm
- (2) Alarm remote control
- (3) Temperature remote control
- (4) Radio gas valve actuator



## Enclosures

laser marking  
on request

## Soluzioni custom

AUREL è specializzata per produzioni custom e relativo progetto con rispondenza alle richieste specifiche del cliente.

### Alcuni esempi

- (1) Sensore magnetico per allarme anti-intrusione
- (2) Allarme per controllo remoto
- (3) Controllo remoto di temperatura
- (4) Controllo remoto elettrovalvola gas

# OUTSOURCING & ELECTRONIC MANUFACTURING SERVICES

AUREL SPA vi può offrire: assistenza al progetto, sicurezza di un prodotto di qualità ed un eccellente servizio di supporto post-vendita. Un gruppo di specialisti dedicati alle attività di progetto è in grado di offrire assistenza sulla tecnologia dei circuiti ibridi a Thick Film ed SMD, per assicurare un completo servizio di progettazione personalizzata.

AUREL SPA can offer you: design assistance, quality assurance and excellent support service.

A dedicated team of design experts offers an efficient answer to both experienced and inexperienced hybrid users and a comprehensive custom design service.

## Mission

AUREL SPA ritiene che la crescita aziendale sia possibile solo dedicandosi alla qualità ed al servizio per il cliente. Il gruppo AUREL ha la stabilità finanziaria per investire nella ricerca e nello sviluppo, assicurandosi il mantenimento della leadership tecnologica, che rappresenta la chiave del proprio continuo successo. AUREL SPA ha due linee di prodotti, sviluppati e prodotti dalla divisione Microelettronica e Radiofrequenza.

AUREL SPA believes in growth through dedication to customer service and quality. AUREL SPA has the financial stability to provide investment for research and development, insuring that it maintains the technological leadership which is central to its continuing success. AUREL SPA has two main line of products: Microelectronic dpt and Wireless dpt.

## R&D

Le produzioni AUREL derivano come naturale conseguenza dall'attività di ricerca specifica, con rigoroso rispetto dei parametri imposti dalla necessità di fornire sempre prodotti innovativi. Il grosso impegno e la quantità d'investimenti profusi nella ricerca e nella tecnologia sono le ragioni principali del successo di AUREL.

AUREL product are the natural consequence of dedicated research performed with rigorous respect for the parameters dictated by the need to provide an innovative products. A strong commitment and investment in research and development are the main reasons for AUREL's success.



## TECHNOLOGIES / APPLICATIONS

- ✓ SMT - High density
- ✓ THICK FILM Technology
- ✓ IMS - Insulated Metal Substrate
- ✓ PES - Porcelain Enamelled Steel
- ✓ COB - Chip On Board

### SMT

Industrial controls, Hand-held equipments, Telecom

### THICK FILM & COB

Sensors, Automotive, Telecom, Avionics, Biomedical, Research

### IMS

Automotive, Motor control, Fork-Lift, UPS, Inverter, Welding machines, Electrical motor, Lighting

### PES

Heaters, Power resistors



## ISO 9001

AUREL, leader nella produzione di circuiti LPD (Low Power Device) è un'azienda con sistema di gestione per la qualità certificato UNI EN ISO 9001:2000 per la produzione di circuiti ibridi a film spesso, circuiti SMT e sistemi SRD (dispositivi a corto raggio).

AUREL, leader into "LOW POWER" RF devices, is working with ISO 9001 Ed. 2000 certified quality system for full design and manufacturing process.

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