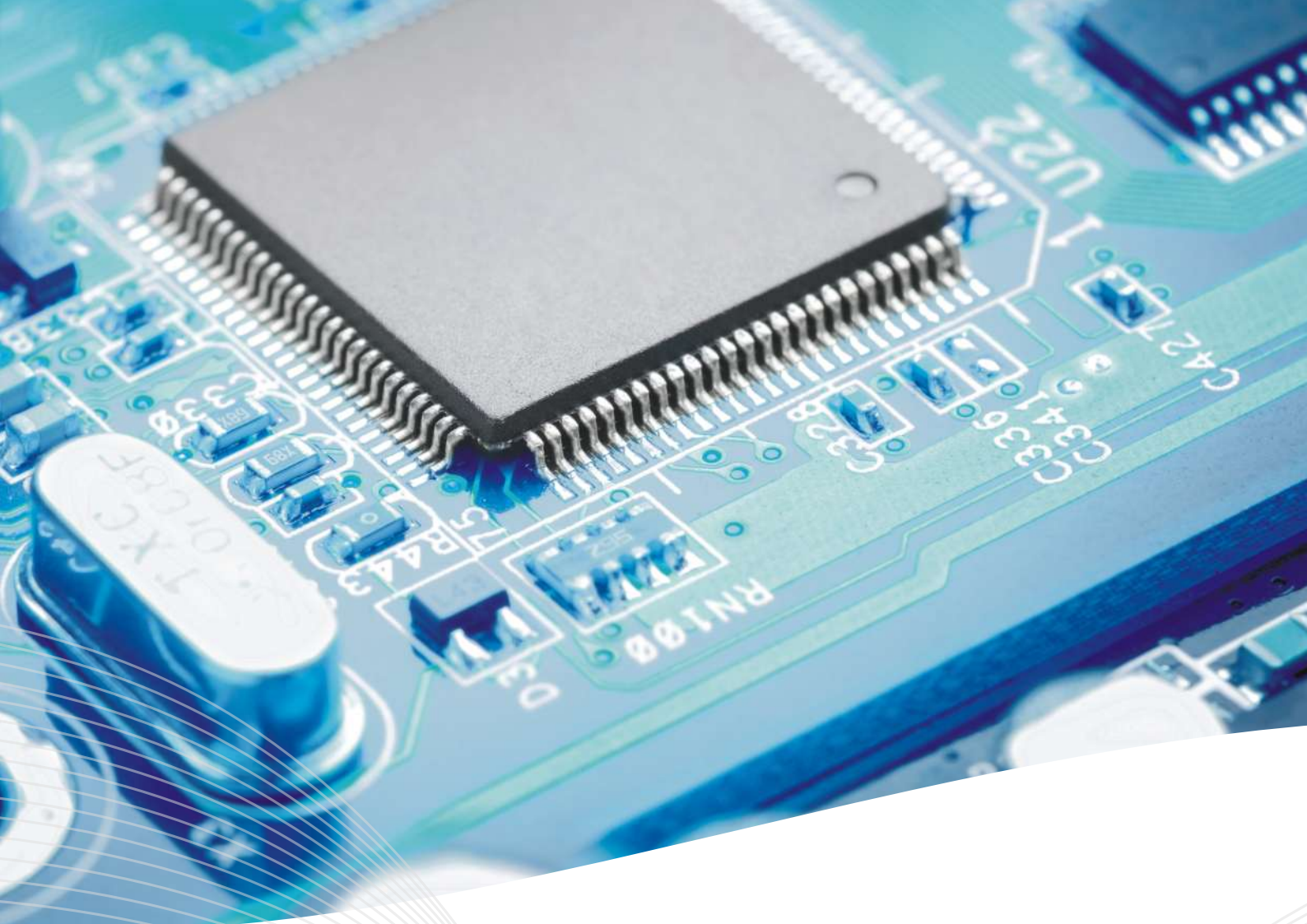




**Wireless solutions & RF modules**

[www.aurelwireless.com](http://www.aurelwireless.com)

# 868 MHz Mesh Network



## RFT 868 3V/5V

Radiomodem available both 3/5 V voltage supply for actuators.

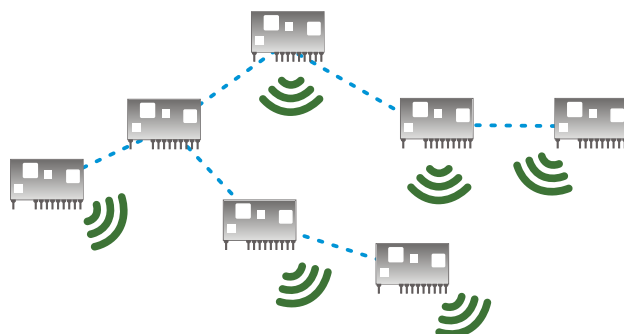
Frequency **868 MHz FSK**  
 Power supply **3V / 5V**  
 Sensitivity **-103 dBm**  
 Out power **+7 dBm**



## RFT-868-REP Wall Repeater

Wall repeater is a specific device intended to extend network coverage. It should be powered with 230VAC and it is provided in a small enclosure fitting in every electrical mounting box. It is equipped with a back-up battery able to power the module for 8 hours.

Size: 43.8 x 43.8 x 25 mm



## Tablet/Smartphone



## RFT-868-5CH

Hand held transmitter for setup & control the local wireless network.

Size: 120.5 x 53 x 18 mm



## RFT-868-USB

The USB dongle equipped with a RFTide serialized module and allows the module itself to be used with PC with no need for further components.

Size: 78 x 22.5 x 15 mm



## RFT-868-GATEWAY

Gateway for controlling the network via web server.

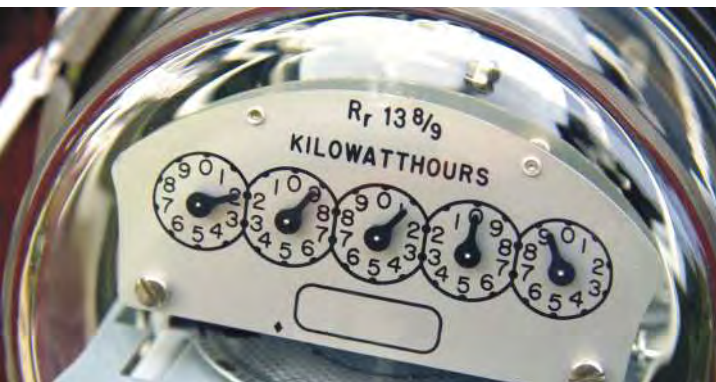
With a standard Wi-Fi infrastructure, all the functionalities can be accessed through a smartphone or a tablet:

Size: 100.6x73.5x26.5mm



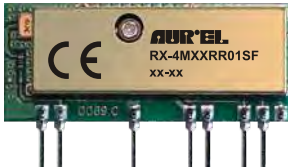


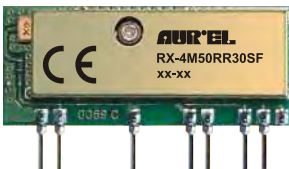
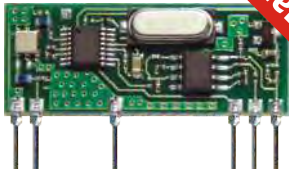
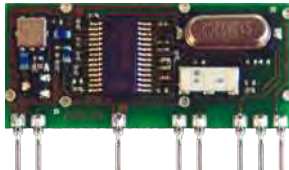
# Applications



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| RX                                                                                  | Model<br>Part Number        | Type                   |                      | Modulation |          | Supply |    | Frequency |         | Current<br>Supply | Sensitivity | Dimension<br>(HxLxD) | Note                                       |
|-------------------------------------------------------------------------------------|-----------------------------|------------------------|----------------------|------------|----------|--------|----|-----------|---------|-------------------|-------------|----------------------|--------------------------------------------|
|                                                                                     |                             | Super-<br>Regenerative | Super-<br>Heterodyne | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz | mA                | dBm         | mm                   |                                            |
|                                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
| LOW COST                                                                            |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
|    | AC-RX2/CS<br>650201133G     | ●                      |                      | ●          |          |        | ●  | ●         |         | 2.5               | -106        | 38.1x12.3x5.5        | Wide Band                                  |
|                                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
| LOW CONSUMPTION                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
|   | BC-NB 3V3<br>650200350G     | ●                      |                      | ●          |          |        | ●  | ●         |         | 0.4               | -99         | 38.1x13.7x5.5        | Wide Band<br>Low Cost<br>400 µA            |
|                                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
|  | RX-4M30RR01SF<br>650200590G | ●                      |                      | ●          |          |        | ●  | ●         |         | 0.07              | -100        | 40.1x17.5x5.5        | Shielded<br>SAW Filtered<br>70 µA          |
|                                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
|  | RX-4MA2<br>650200858G       | ●                      |                      | ●          |          |        | ●  | ●         |         | 0.7               | -106        | 39x15x3              | 5V SAW Filtered<br>700 µA                  |
|                                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
| CLASS 1                                                                             |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |
|  | RX-CLASS1 869<br>650201247G |                        | ●                    | ●          |          | ●      | ●  |           | ●       | 40                | -115        | 47.7x20.9x3.7        | Narrow Band<br>869.25 MHz<br>Social Alarms |
|                                                                                     |                             |                        |                      |            |          |        |    |           |         |                   |             |                      |                                            |

| RX                                                                                  | Model<br>Part Number                  | Type                   |                      | Modulation |          | Supply |    | Frequency |         | Current<br>Supply<br>mA | Sensitivity<br>dBm | Dimension<br>(HxLxD)<br>mm | Note                                     |
|-------------------------------------------------------------------------------------|---------------------------------------|------------------------|----------------------|------------|----------|--------|----|-----------|---------|-------------------------|--------------------|----------------------------|------------------------------------------|
|                                                                                     |                                       | Super-<br>Regenerative | Super-<br>Heterodyne | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz |                         |                    |                            |                                          |
|    | <b>RX-4MM3/F</b><br>650201139G        | ●                      | ●                    |            |          | ●      |    | ●         |         | 7.5                     | -114               | 36.3x15x5                  | Super-Het<br>Output Filter               |
|                                                                                     | <b>RX-4MM5/F</b><br>650201110G        | ●                      | ●                    |            |          |        | ●  | ●         |         | 7.5                     | -114               | 36.3x15x5                  | Super-Het<br>Output Filter               |
|    | <b>RX-4MM3++/F</b><br>650201138G      | ●                      | ●                    |            |          | ●      |    | ●         |         | 7.5                     | -113               | 36.5x15x5                  | Super-Het<br>SAW Filter<br>Output Filter |
|                                                                                     | <b>RX-4MM5++/F</b><br>650201140G      | ●                      | ●                    |            |          |        | ●  | ●         |         | 7.5                     | -113               | 36.5x15x5                  | Super-Het<br>SAW Filter<br>Output Filter |
|  | <b>RX-MID 3V</b><br>650201034G        | ●                      | ●                    |            |          | ●      |    | ●         |         | 6                       | -111               | 25.4x12.4x4                | Tiny Size<br>Super-het<br>SAW Filtered   |
|  | <b>RX-4M50RR30SF</b><br>650200527G    | ●                      | ●                    |            |          |        | ●  | ●         |         | 3                       | -106               | 40.1x17.5x5.5              | Shielded &<br>SAW Filtered               |
|  | <b>RX-8ML5/F</b><br>650201220G        | ●                      | ●                    |            |          |        | ●  | ●         |         | 10                      | -113               | 36.5x15x4.2                | Super-Het<br>Output Filter               |
|                                                                                     | <b>RX-8ML5++/F</b><br>650201208G      | ●                      | ●                    |            |          |        | ●  | ●         |         | 10                      | -113               | 36.5x15x4.2                | Super-Het<br>Output Filter<br>SAW Filter |
|  | <b>RX-FM4SF 433.92</b><br>650201096G  | ●                      |                      | ●          |          | ●      | ●  |           |         | 5.6                     | -105               | 38x17x4                    | FSK<br>High Selectivity<br>Super-het     |
|                                                                                     | <b>RX-FM4SF 434.15*</b><br>650201108G | ●                      |                      | ●          |          | ●      | ●  |           |         | 5.6                     | -105               | 38x17x4                    | FSK<br>High Selectivity<br>Super-het     |
|                                                                                     | <b>RX-FM8SF 868.30*</b><br>650201097G | ●                      |                      | ●          |          | ●      |    | ●         |         | 5.6                     | -105               | 38x17x4                    | FSK<br>High Selectivity<br>Super-het     |

\* RX-FM4SF 434.15 (650201108G) - RX-FM8SF 868.30 (650201097G)  
Da usare con trasmettitori dual band - To be used with dual band transmitters

| Model<br>Part Number | Type |     | Modulation |          | Supply |    | Frequency |         | Current<br>Supply | Output<br>Power | Dimension<br>(HxLxD) | Note |
|----------------------|------|-----|------------|----------|--------|----|-----------|---------|-------------------|-----------------|----------------------|------|
|                      | SAW  | PLL | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz | mA                | dBm             | mm                   |      |

## STANDARD SIZE



**TX-SAW 433 s/Z**  
650200689G



5

10

38.1x13.2x3

**434 MHz ASK**  
**3-5V**



**TX-8LAVSA05**  
650200546G



5

7

38.1x13.7x3

**868 MHz ASK**  
**3-5V**



**TX-FM 868**  
650201128G



5

8

33x13.5x3

**868 MHz FSK**  
**3V**

## TINY SIZE 'MID'



**TX-SAW MID 3V/CS**  
650201131G



3+7

10

25.4x12.5x2.5

**434 MHz ASK**  
**3V**

**TX-SAW MID 5V/CS**  
650201132G



3+7

10

25.4x12.5x2.5

**434 MHz ASK**  
**5V**



**TX-FM-MID**  
650200926G



14

10

25.4x12.4x2.5

**434 MHz FSK**  
**3V**



**new**

**TX-AM 868 MID**  
650201182G



5

10

25.4x12.4x2.5

**868 MHz ASK**  
**3V**



**TX-FM 868 MID**  
650201130G



16

10

25.4x13.5x2.5

**868 MHz FSK**  
**3V**



TX

Model  
Part Number

Type

Modulation

Supply

Frequency

Current  
Supply

Output  
Power

Dimension  
(HxLxD)

Note

SAW

PLL

ASK (AM)

FSK (FM)

3V

5V

434 MHz

868 MHz

mA

dBm

mm

INTEGRATED ANTENNA

**TX-4M10HA**  
650200819G

●

●

●

●

25

10

56x18.5x10

**434 MHz ASK  
TX SAW**

**TX-4M10HA/V**  
650200834G

●

●

●

●

25

10

56x18.5x10

**434 MHz ASK  
Vertical Pin  
TX SAW**

**TX-8L25IA**  
650200846G

●

●

●

●

25

14

56x18.5x10

**868 MHz ASK  
TX SAW**

**TX-8L25IA/V**  
650200847G

●

●

●

●

25

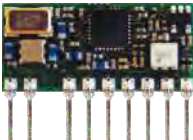
14

56x18.5x10

**868 MHz ASK  
Vertical Pin  
TX SAW**

## Single Channel Transceivers



| Model<br>Part Number                                                                              | Modulation                           |          | Supply |    | Frequency |         | Sensitivity | Current<br>Supply     | Output<br>Power | Dimension<br>(HxLxD) | Note                                |
|---------------------------------------------------------------------------------------------------|--------------------------------------|----------|--------|----|-----------|---------|-------------|-----------------------|-----------------|----------------------|-------------------------------------|
|                                                                                                   | ASK (AM)                             | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz | dBm         | mA                    | mW              | mm                   |                                     |
|                                                                                                   |                                      |          |        |    |           |         |             |                       |                 |                      |                                     |
|                 | <b>RTX MID 3V</b><br>650201033G      | ●        |        | ●  |           | ●       | -110        | 7 RX<br>15 TX<br>1µA  | 10              | 25.4x12.5x2.5        | <b>434 MHz ASK<br/>Tiny Size 3V</b> |
|                                                                                                   | <b>RTX MID 5V</b><br>650201044G      | ●        |        |    | ●         | ●       | -110        | 7 RX<br>15 TX<br>1µA  | 10              | 25.4x12.5x2.5        | <b>434 MHz ASK<br/>Tiny Size 5V</b> |
|  <div>new</div> | <b>RTX MID 868 OOK</b><br>650201259G | ●        |        | ●  | ●         |         | -108        | 20 AM<br>29 FM<br>1µA | 10              | 26x17.2x3.2          | <b>868 MHz ASK<br/>Tiny Size</b>    |
|                                                                                                   | <b>RTX MID 868 FSK</b><br>650201258G |          | ●      | ●  | ●         |         | -109        | 20 AM<br>29 FM<br>1µA | 10              | 26x17.2x3.2          | <b>868 MHz FSK<br/>Tiny Size</b>    |

# Multi Channel Transceivers

| Model<br>Part Number                                                                                                           | Modulation |          | Supply |    | Frequency |         |         | Sensitivity | Current<br>Supply        | Output<br>Power | Dimension<br>(HxLxD) | Note                                     |
|--------------------------------------------------------------------------------------------------------------------------------|------------|----------|--------|----|-----------|---------|---------|-------------|--------------------------|-----------------|----------------------|------------------------------------------|
|                                                                                                                                | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz | 2.4 GHz | dBm         | mA                       | mW              | mm                   |                                          |
|  <b>XTR-7020A-4</b><br>650200925G             |            | ●        | ●      |    | ●         |         |         |             | 26 Rx<br>31 Tx<br>18 µA  | 10              | 33x23x8              | 10 Chs<br>µP embedded                    |
| <b>XTR-7020A-8</b><br>650200998G                                                                                               |            | ●        | ●      |    | ●         |         |         |             | 26 Rx<br>31 Tx<br>18 µA  | 10              | 33x23x8              | 7 Chs<br>µP embedded                     |
|  <b>WIZ-7020A-4</b><br>650200960G             |            | ●        |        | ●  | ●         |         |         |             | 36 Rx<br>45 Tx           | 3               | 68x48x10             | 10 Chs<br>Radio Modem                    |
| <b>WIZ-7020A-8</b><br>650200999G                                                                                               |            | ●        |        | ●  | ●         |         |         |             | 36 Rx<br>45 Tx           | 3               | 68x48x10             | 7Chs<br>Radio Modem                      |
|  <b>XTR VF 2.4 LP</b><br>6502001025G         |            | ●        | ●      |    |           |         | ●       | -93         | 21 Rx<br>34 Tx<br>0.8 µA | 2               | 32x25x5              | Very Fast (1Mbps)<br>Low Power<br>78 Chs |
|  <b>XTR VF 2.4 PA-LNA HAI</b><br>650201204G |            | ●        | ●      |    |           |         | ●       | -100        | 31 Rx<br>100 Tx<br>2 µA  | 20              | 32 x 25 x 5          | High Power<br>Very Fast<br>78 Chs        |
| Available with external antenna (XTR VF 2.4 PA-LNA HAE - 650201203G)                                                           |            |          |        |    |           |         |         |             |                          |                 |                      |                                          |
|  <b>XTR RF4CE</b><br>650201261G             |            | ●        | ●      |    |           |         | ●       | -89         | 25                       | 3               | 49x25x7              | Compatible with<br>RF4CE standard        |

## Demo Boards

| Model<br>Part Number                                                                                                        | Modulation |          | Supply |    | Frequency |         | Sensitivity | Current<br>Supply | Output<br>Power | Dimension<br>(HxLxD) | Note                     |
|-----------------------------------------------------------------------------------------------------------------------------|------------|----------|--------|----|-----------|---------|-------------|-------------------|-----------------|----------------------|--------------------------|
|                                                                                                                             | ASK (AM)   | FSK (FM) | 3V     | 5V | 868 MHz   | 2.4 GHz | dBm         | mA                | mW              | mm                   |                          |
|  <b>DEMO XTR VF 2.4 LP</b><br>650201051G |            | ●        |        | ●  |           | ●       | -93         | 24 RX<br>38 TX    | 2               | 61x68x40             | 4 Chs<br>RS232 19.2 Kbps |
| <b>DEMO XTR VF 2.4 PA LNA</b><br>650201225G                                                                                 |            | ●        |        | ●  |           | ●       | -100        | 34 RX<br>104 TX   | 20              | 61x68x40             | 4 Chs<br>RS232 19.2 Kbps |



# HCS Keyfobs, Receivers, Decoders

| Rx/Dec | Model<br>Part Number              | Type                   |                      | Modulation |          | Supply |     | Frequency |         | Current<br>Supply<br>mA | Sensitivity<br>dBm | Dimension<br>(HxLxD)<br>mm | Note                         |
|--------|-----------------------------------|------------------------|----------------------|------------|----------|--------|-----|-----------|---------|-------------------------|--------------------|----------------------------|------------------------------|
|        |                                   | Super-<br>Regenerative | Super-<br>Heterodyne | ASK (AM)   | FSK (FM) | 5V     | 12V | 434 MHz   | 868 MHz |                         |                    |                            |                              |
|        |                                   |                        |                      |            |          |        |     |           |         |                         |                    |                            |                              |
|        | <b>RX-4M HCS</b><br>650200997G    |                        |                      |            |          |        |     |           |         | 3                       | -106               | 39x17.5x5                  | 4 Open collector<br>Output   |
|        |                                   |                        |                      |            |          |        |     |           |         |                         |                    |                            |                              |
|        | <b>RX-4M HCS 4B</b><br>650201036G |                        |                      |            |          |        |     |           |         | 3                       | -106               | 39x17.5x5                  | 4 Binary<br>Output           |
|        |                                   |                        |                      |            |          |        |     |           |         |                         |                    |                            |                              |
|        | <b>HCS-DEC 1</b><br>650201009G    |                        |                      |            |          |        |     |           |         | 66 ac<br>52 dc          | -100               | 65x45x18                   | 1CH 434 MHz<br>Decoder Board |
|        | <b>HCS-DEC 2</b><br>650201014G    |                        |                      |            |          |        |     |           |         | 66 ac<br>52 dc          | -100               | 65x45x18                   | 2CH 434 MHz<br>Decoder Board |
|        | <b>HCS-DEC 4</b><br>650200994G    |                        |                      |            |          |        |     |           |         | 66 ac<br>52 dc          | -100               | 65x45x18                   | 4CH 434 MHz<br>Decoder Board |



| TxS | Model<br>Part Number                                                | Modulation |          | Supply |     | Frequency |         | Current<br>Supply<br>mA | Output<br>Power<br>mW | Dimension<br>(HxLxD)<br>mm | Note                        |
|-----|---------------------------------------------------------------------|------------|----------|--------|-----|-----------|---------|-------------------------|-----------------------|----------------------------|-----------------------------|
|     |                                                                     | ASK (AM)   | FSK (FM) | 3V     | 12V | 434 MHz   | 868 MHz |                         |                       |                            |                             |
|     |                                                                     |            |          |        |     |           |         |                         |                       |                            |                             |
|     | <b>HCS TX1/2/3</b><br>650200693G<br>650200683G<br>650200684G        |            |          |        |     |           |         | 10                      | 0.5                   | 54x43x11                   | ASK 1/3Ch Keyfob<br>434 MHz |
|     |                                                                     |            |          |        |     |           |         |                         |                       |                            |                             |
|     | <b>HCS FM TX1/2/3</b><br>650200903G<br>650200791G<br>650200904G     |            |          |        |     |           |         | 10                      | 0.5                   | 54x43x11                   | FSK 1/3Ch Keyfob<br>434 MHz |
|     |                                                                     |            |          |        |     |           |         |                         |                       |                            |                             |
|     | <b>HCS TX1/2/3 868</b><br>650200910G<br>650200714G<br>650200891G    |            |          |        |     |           |         | 10                      | 0.5                   | 54x43x11                   | ASK 1/3Ch Keyfob<br>868 MHz |
|     |                                                                     |            |          |        |     |           |         |                         |                       |                            |                             |
|     | <b>HCS FM TX1/2/3 868</b><br>650200864G<br>650200863G<br>650200862G |            |          |        |     |           |         | 10                      | 0.5                   | 54x43x11                   | FSK 1/3Ch Keyfob<br>868 MHz |



'OVO' CASE

I codici P.N. si riferiscono a telecomandi programmati con codice AUREL  
Above P.N. refer to keyfobs programmed with AUREL manufacturer code

# HCS Keyfobs

| Model<br>Part Number                                                                                     | Modulation |          | Supply |     | Frequency |         | Current<br>Supply<br>mA | Output<br>Power<br>mW | Dimension<br>(HxLxD)<br>mm | Note                              |
|----------------------------------------------------------------------------------------------------------|------------|----------|--------|-----|-----------|---------|-------------------------|-----------------------|----------------------------|-----------------------------------|
|                                                                                                          | ASK (AM)   | FSK (FM) | 3V     | 12V | 434 MHz   | 868 MHz |                         |                       |                            |                                   |
| <br><b>'HCS' CASE</b>   |            |          |        |     |           |         |                         |                       |                            |                                   |
| <b>TX1/2/3 HCS 433-A</b><br>650200765G<br>650200808G<br>650200759G                                       | ●          |          |        | ●   | ●         |         | 10                      | 0.5                   | 56.5x35x13.5               | ASK 1/2/3Ch<br>434 MHz            |
| <br><b>'M' CASE</b>     |            |          |        |     |           |         |                         |                       |                            |                                   |
| <b>TX 2/4/6M HCS</b><br>650200900G<br>650200901G<br>650200828G                                           | ●          |          |        | ●   | ●         |         | 15                      | 1                     | 75x40x16                   | ASK 2/4/6Ch<br>434 MHz            |
| <b>TX 2/4/6M HCS 868</b><br>650201142G<br>650201143G<br>650201144G                                       |            | ●        |        | ●   | ●         |         | 16                      | 1                     | 75x40x16                   | FSK 2/4/6Ch<br>868 MHz            |
| <br><b>'12CH' CASE</b> |            |          |        |     |           |         |                         |                       |                            |                                   |
| <b>TX 12CH EVO</b><br>650201226G                                                                         | ●          |          |        | ●   | ●         |         | 10                      | 1                     | 85.5x54x10.5               | ASK 12Ch<br>434 MHz               |
| <br><b>'KEY' CASE</b> |            |          |        |     |           |         |                         |                       |                            |                                   |
| <b>TX KEY 15</b><br>650201297G                                                                           | ●          |          |        | ●   | ●         |         | 40                      | 10                    | 169x75x32                  | ASK 15Ch<br>434 MHz<br>High Power |

I codici sopra si riferiscono a telecomandi programmati con codice AUREL  
 Above P.N. refer to keyfobs programmed with AUREL manufacturer code

# Cloner

| Model<br>Part Number                                                                                   | Modulation |          | Supply |     | Frequency |         | Current<br>Supply<br>mA | Output<br>Power<br>mW | Dimension<br>(HxLxD)<br>mm | Note                       |
|--------------------------------------------------------------------------------------------------------|------------|----------|--------|-----|-----------|---------|-------------------------|-----------------------|----------------------------|----------------------------|
|                                                                                                        | ASK (AM)   | FSK (FM) | 3V     | 12V | 434 MHz   | 868 MHz |                         |                       |                            |                            |
| <br><b>'M' CASE</b> |            |          |        |     |           |         |                         |                       |                            |                            |
| <b>TX 4M CP</b><br>650201289G                                                                          | ●          |          |        | ●   | ●         |         | 10                      | 1.2                   | 75x40x16                   | Universal Remote<br>Cloner |

## HT12E Keyfobs

| HT12E | Model<br>Part Number | Modulation |          | Supply |     | Frequency |         | Current<br>Supply | Output<br>Power | Dimension<br>(HxLxD) | Note |
|-------|----------------------|------------|----------|--------|-----|-----------|---------|-------------------|-----------------|----------------------|------|
|       |                      | ASK (AM)   | FSK (FM) | 3V     | 12V | 434 MHz   | 868 MHz |                   |                 |                      |      |
|       |                      |            |          |        |     |           |         | mA                | mW              | mm                   |      |



'TX' CASE



'C' CASE

|                                      |   |  |  |   |  |   |  |    |   |            |                       |
|--------------------------------------|---|--|--|---|--|---|--|----|---|------------|-----------------------|
| <b>TX12E 1TK</b><br>650201000G       | ● |  |  | ● |  | ● |  | 10 | 1 | 65.5x37x15 | <b>ASK 1Ch Keyfob</b> |
| <b>TX12E 2TK</b><br>650201001G       | ● |  |  | ● |  | ● |  | 10 | 1 | 65.5x37x15 | <b>ASK 2Ch Keyfob</b> |
| <b>TX12E 1C SAW433</b><br>650200919G | ● |  |  | ● |  | ● |  | 7  | 1 | 75x44x8.5  | <b>ASK 1Ch Keyfob</b> |
| <b>TX12E 2C SAW433</b><br>650200918G | ● |  |  | ● |  | ● |  | 7  | 1 | 75x44x8.5  | <b>ASK 2Ch Keyfob</b> |
| <b>TX12E 4C SAW433</b><br>650200917G | ● |  |  | ● |  | ● |  | 7  | 1 | 75x44x8.5  | <b>ASK 4Ch Keyfob</b> |

## 145026 Keyfobs

| 145026 | Model<br>Part Number | Modulation |          | Supply |     | Frequency |         | Current<br>Supply | Output<br>Power | Dimension<br>(HxLxD) | Note |
|--------|----------------------|------------|----------|--------|-----|-----------|---------|-------------------|-----------------|----------------------|------|
|        |                      | ASK (AM)   | FSK (FM) | 5V     | 12V | 434 MHz   | 868 MHz |                   |                 |                      |      |
|        |                      |            |          |        |     |           |         | mA                | mW              | mm                   |      |



'TK' CASE



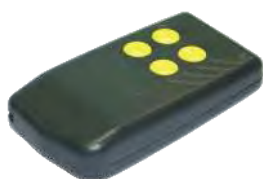
'C' CASE

|                                    |   |  |  |   |  |   |  |    |   |            |                       |
|------------------------------------|---|--|--|---|--|---|--|----|---|------------|-----------------------|
| <b>TX 1TK SAW433</b><br>650200134G | ● |  |  | ● |  | ● |  | 10 | 1 | 65.5x37x15 | <b>ASK 1Ch Keyfob</b> |
| <b>TX 2TK SAW433</b><br>650200135G | ● |  |  | ● |  | ● |  | 10 | 1 | 65.5x37x15 | <b>ASK 2Ch Keyfob</b> |
| <b>TX 1C 5026</b><br>650200463G    | ● |  |  | ● |  | ● |  | 10 | 1 | 75x44x8.5  | <b>ASK 1Ch Keyfob</b> |
| <b>TX 2C 5026</b><br>650200444G    | ● |  |  | ● |  | ● |  | 10 | 1 | 75x44x8.5  | <b>ASK 2Ch Keyfob</b> |
| <b>TX 4C 5026</b><br>650200462G    | ● |  |  | ● |  | ● |  | 10 | 1 | 75x44x8.5  | <b>ASK 4Ch Keyfob</b> |



## Low Power Receiver & Keyfobs

| Model<br>Part Number                            | Modulation |          | Supply |    | Frequency |         | Current<br>Supply | Sensitivity | Output<br>Power | Dimension<br>(HxLxD) | Note                                        |
|-------------------------------------------------|------------|----------|--------|----|-----------|---------|-------------------|-------------|-----------------|----------------------|---------------------------------------------|
|                                                 | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz |                   |             |                 |                      |                                             |
|                                                 |            |          |        |    |           |         | mA                | dBm         | mW              | mm                   |                                             |
| <b>RX 4M <math>\mu</math>P/LP</b><br>650201168G | ●          |          |        | ●  | ●         |         | 0.1               | -114        |                 | 41x20x3              | Low Power (100 $\mu$ A)<br>$\mu$ P embedded |
|                                                 |            |          |        |    |           |         |                   |             |                 |                      |                                             |
| <b>TX 2M <math>\mu</math>P/LP</b><br>650201165G | ●          |          | ●      |    | ●         |         | 10                |             | 0.5             | 75x40x16             | ASK 434 Keyfob<br>2Ch $\mu$ P embedded      |
| <b>TX 4M <math>\mu</math>P/LP</b><br>650201166G | ●          |          | ●      |    | ●         |         | 10                |             | 0.5             | 75x40x16             | ASK 434 Keyfob<br>4Ch $\mu$ P embedded      |



## Sensors

| Model<br>Part Number                    | Modulation |          | Supply |    | Frequency |         | Current<br>Supply  | ERP | PIR<br>Coverage | Dimension<br>(HxLxD) | Note                               |
|-----------------------------------------|------------|----------|--------|----|-----------|---------|--------------------|-----|-----------------|----------------------|------------------------------------|
|                                         | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz |                    |     |                 |                      |                                    |
|                                         |            |          |        |    |           |         | mA                 | mW  | mt              | mm                   |                                    |
| <b>SIR 2008 HCS/HT12E</b><br>650201090G | ●          |          | ●      |    | ●         |         | 9 Tx<br>13 $\mu$ A | 1   | 8+20            | 120x60x45            | PIR Detector<br>Encoder HCS/HT12E  |
| <b>SIR 2008 HCS/5026</b><br>650201107G  | ●          |          | ●      |    | ●         |         | 9 Tx<br>13 $\mu$ A | 1   | 8+20            | 120x60x45            | PIR Detector<br>Encoder HCS/145026 |
|                                         |            |          |        |    |           |         |                    |     |                 |                      |                                    |
| <b>MAGCON HCS</b><br>650201296G         | ●          |          | ●      |    | ●         |         | 15 Tx<br>5 $\mu$ A | 2   |                 | 70.4x33.6x17.4       | Magnetic Contact<br>HCS encoder    |
| <b>MAGCON 5026</b><br>650201295G        | ●          |          | ●      |    | ●         |         | 15 Tx<br>5 $\mu$ A | 2   |                 | 70.4x33.6x17.4       | Magnetic Contact<br>145026 encoder |



# High Power Receivers & Transmitters

| Model<br>Part Number                 | Modulation |          | Supply |    | Frequency |         | Current<br>Supply | Sensitivity | Output<br>Power | Dimension<br>(HxLxD) | Note                                        |
|--------------------------------------|------------|----------|--------|----|-----------|---------|-------------------|-------------|-----------------|----------------------|---------------------------------------------|
|                                      | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz | mA                | dBm         | mW              | mm                   |                                             |
| <b>TX 869 BOOST</b><br>650201088G    | ●          |          | ●      |    | ●         |         | 420               | +27         | 500             | 33x23x8              | 869.50 MHz<br>TX 500 mW                     |
| <b>RX FM8SF 869.50</b><br>650201109G | ●          |          | ●      |    | ●         |         | 5.6               | -111        |                 | 45x17.2x8.5          | 869.50 MHz<br>High Sensitivity<br>(-111dBm) |

## Long Range Demoboards

### DEMO TX BOOST 869

650201134G

Insieme alla DEMO RX BOOST 869 può essere usata per provare le distanze sul campo e il funzionamento generale del nuovo trasmettitore a 500 mW prodotto in accordo con le Normative Europee.

With related DEMO RX BOOST 869 can be used to field test distance and performance of the new 500mW European compliant transmitter. Portability assured from battery operation.



### DEMO RX BOOST 869

650201135G

Insieme alla DEMO TX BOOST 869 può essere usata per provare le distanze sul campo e il funzionamento generale del nuovo trasmettitore a 500 mW prodotto in accordo con le Normative Europee.

With related DEMO TX BOOST 869 can be used to field test distance and performance of the new 500 mW European compliant transmitter. Four relays at receiver card are controlled from four push buttons at transmitter.



## Dual Band Transmitters

| Model<br>Part Number                                                            | Type |     | Modulation |          | Supply |    | Frequency |         | Current<br>Supply | Output<br>Power | Dimension<br>(HxLxD) | Note                       |
|---------------------------------------------------------------------------------|------|-----|------------|----------|--------|----|-----------|---------|-------------------|-----------------|----------------------|----------------------------|
|                                                                                 | SAW  | PLL | ASK (AM)   | FSK (FM) | 3V     | 5V | 434 MHz   | 868 MHz | mA                | mW              | mm                   |                            |
| <b>TX FM 434/868 *</b><br>650201089G                                            | ●    |     | ●          |          | ●      |    | ●         | ●       | 38                | 6               | 33x14x2.5            | 434/868 MHz<br>FSK SAW     |
| * To be used with RX-FM4SF 434.15 (650201108G) and RX-FM8SF 868.30 (650201097G) |      |     |            |          |        |    |           |         |                   |                 |                      |                            |
| <b>TX FM 434/868 MID *</b><br>650201129G                                        | ●    |     | ●          |          | ●      |    | ●         | ●       | 38                | 6               | 25.4x14.3x2.5        | 434/868 MHz<br>FSK SAW MID |
| * To be used with RX-FM4SF 434.15 (650201108G) and RX-FM8SF 868.30 (650201097G) |      |     |            |          |        |    |           |         |                   |                 |                      |                            |

## Dual Band Demoboards

### DEMO TX FM 434/868 MID

650201136G



### DEMO RX FM 434/868

650201137G



## 2.4 Ghz ZigBee Pro modules

### Basso Consumo / Low Power

Moduli ad alta efficienza (**XTR-ZBPRO-RLI**) e ad alta potenza (**XTR-ZBPRO-RHI**) per copertura ottimale anche di vaste superfici.

Interfaccia operativa su PC mediante OCX che può essere integrato da un programma ad alto livello (Visual Basic, Visual C, Java ecc) del cliente consentendo la gestione dell'intera rete.

Software applicativo in Visual Basic per l'utilizzo del componente OCX Aurel che dimostra la creazione, la gestione e la diagnostica della rete utilizzando solo comandi ad alto livello senza necessità di conoscere dettagli specifici propri della rete.

Scambio dati di tipo Mesh fra dispositivi della rete mediante l'utilizzo di sole stringhe ASCII con indirizzo più dati.

Possibilità di blocco della rete una volta formata e attivata con certezza del controllo di tutti i componenti anche in presenza di reti ZigBee contigue.

Set di comandi mediante stringhe ASCII per l'utilizzo a basso livello dei moduli.

High efficiency (**XTR-ZBPRO-RLI**) and high power (**XTR-ZBPRO-RHI**) modules for best coverage of wide areas.

PC operative interface through OCX file which can be easily embedded into the customer high level language program (Visual Basic, Visual C, Java, etc.) allowing the convenient network handling.

Application software in Visual Basic language for usage of Aurel OCX component which shows how to create, manage and monitor the network by means of high level commands without needing any further pieces of information regarding the network itself.

Mesh-type data transmission among network nodes by utilizing only ASCII strings made up of address+data format.

Possibility to lock the network once it is built up and working, allowing the highest control even in presence of other nearby Zigbee networks.

Commands set by ASCII strings for low level module usage.



**new**

**XTR-ZBPRO-CLI** P.N. 650201290G

**XTR-ZBPRO-RLI** P.N. 650201291G

### Alta Potenza / High Power



**new**

**XTR-ZBPRO-CHE** P.N. 650201292G

**XTR-ZBPRO-RHE** P.N. 650201293G

[www.aurel-zigbee.com](http://www.aurel-zigbee.com)

## Applicazioni ZigBee / ZigBee Applications



### DOMOTICA

Automatizzazione porte/finestre  
Risparmio energetico  
Illuminazione e irrigazione giardini  
Gestione sicurezza casa

### HOME AUTOMATION

Windows & door automation  
Energy management  
Lighting & garden irrigation  
Home security



### AUTOMAZIONE EDIFICI

Monitoraggio ambientale  
Telelettura contatori  
Gestione clima centralizzato  
Controllo accessi e movimenti

### BUILDING AUTOMATION

Environmental monitoring  
Lighting monitoring  
Access & movement control  
Automatic smoke & CO detectors



### SALUTE & BENESSERE

Monitoraggio pazienti  
Controllo apparecchi ospedalieri  
Controllo centri fitness

### HEALTHCARE

Patient monitoring  
Medical devices control  
Fitness center management



### ELETTRONICA & PC

Interfacce di comunicazione  
Gestione periferiche  
Scambio dati

### CONSUMER ELECTRONICS

Peripherals management  
Data exchange



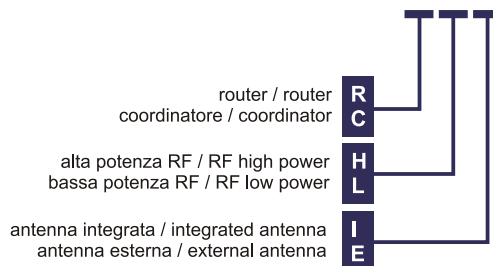
### AUTOMAZIONE INDUSTRIALE

Gestione consumi energetici  
Controllo accessi e processi  
Localizzazione merci  
Reti di sensori  
Acquisizione dati remota

### INDUSTRIAL AUTOMATION

Remote data control  
Sensors networks  
Access control  
Production management

## XTR-ZBPRO-xxx



### Kit Sviluppo / Development Kit

**Kit ZigBee Pro/5L** P.N. 650201300G **Low power modules**

**Kit ZigBee Pro/5H** P.N. 650201301G **High power modules**



### Accessori / Accessories

**RP SMA 2.4** P.N. 650201098G

Compatibile con / Compatible with  
**XTR-ZBPRO-CHE, XTR-ZBPRO-RHE**



| ANT | Model<br>Part Number | Type            |        | Frequency |         |         | Impedance<br>Ohm | Dimension<br>(HxLxD)<br>mm | Note |
|-----|----------------------|-----------------|--------|-----------|---------|---------|------------------|----------------------------|------|
|     |                      | Ground<br>Plane | Stylus | 434 MHz   | 868 MHz | 2.4 GHz |                  |                            |      |



|                                  |  |  |   |   |   |  |    |        |                          |
|----------------------------------|--|--|---|---|---|--|----|--------|--------------------------|
| <b>ANT. AS 433</b><br>650200596G |  |  | ● | ● |   |  | 50 | 34x170 | Outdoor vertical Antenna |
| <b>ANT. AS 868</b><br>650200597G |  |  | ● |   | ● |  | 50 | 34x90  | Outdoor vertical Antenna |



|                                  |  |   |  |   |   |  |    |         |                      |
|----------------------------------|--|---|--|---|---|--|----|---------|----------------------|
| <b>ANT. GP 433</b><br>650200313G |  | ● |  | ● |   |  | 50 | 110x255 | Ground Plane Antenna |
| <b>ANT. GP 868</b><br>650200599G |  | ● |  |   | ● |  | 50 | 190x460 | Ground Plane Antenna |



|                                |  |  |   |   |   |  |    |       |                         |
|--------------------------------|--|--|---|---|---|--|----|-------|-------------------------|
| <b>ANT. T</b><br>650200442G    |  |  | ● | ● |   |  | 50 | 10x90 | Flexible Stylus Antenna |
| <b>ANT. T-A</b><br>650200448G  |  |  | ● | ● |   |  | 50 | 10x90 | Flexible Stylus Antenna |
| <b>ANT. T/8</b><br>650200607G  |  |  | ● |   | ● |  | 50 | 10x90 | Flexible Stylus Antenna |
| <b>ANT. T8/A</b><br>650200608G |  |  | ● |   | ● |  | 50 | 10x90 | Flexible Stylus Antenna |



|                                      |  |  |   |  |  |   |    |        |                 |
|--------------------------------------|--|--|---|--|--|---|----|--------|-----------------|
| <b>ANT. RP SMA 2.4</b><br>650201098G |  |  | ● |  |  | ● | 50 | 10x108 | 2.4 GHz Antenna |
|--------------------------------------|--|--|---|--|--|---|----|--------|-----------------|



# ELECTRONIC MANUFACTURING SERVICES

## Presentazione

AUREL 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.

## Missione

AUREL 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 ha due linee di prodotti, sviluppati e prodotti dalla divisione Microelettronica e Radiofrequenza.

## Ricerca e Sviluppo

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.

## Tecnologie

### SMT

Controlli industriali, Strumentazione portatile, Telecomunicazioni.

### THICK FILM & COB

Sensori, Automotive, Telecomunicazioni, Avionica, Biomedicale, Ricerca.

### IMS

Automotive, Controllo motori, Saldatrici, Motori elettrici, Lighting.

### PES

Elementi riscaldanti, Resistori di potenza.

## Overview

AUREL 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 believes in growth through dedication to customer service and quality.

AUREL 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 has two main line of products: Microelectronic dpt and Wireless dpt.

## Research & Development

AUREL's production is the natural consequence of dedicated research performed with rigorous respect for the parameters dictated by the need to provide innovative products.

A strong commitment and investment in research and development are the main reasons for AUREL's success.

## Technologies

### SMT

Industrial controls, Hand-held equipments, Telecom.

### THICK FILM & COB

Sensors, Automotive, Telecom, Avionics, Biomedical, Research.

### IMS

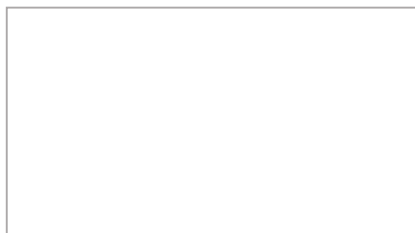
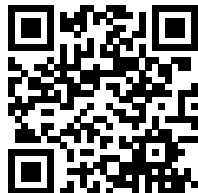
Automotive, Motor control, Welding machines, Electrical motor, Lighting.

### PES

Heaters, Power resistors.



Seguici su:



Rivenditore/Reseller

# AUREL

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