

## PRD10653 VOD SERVER CRYSTAL – ACT800 DATASHEET



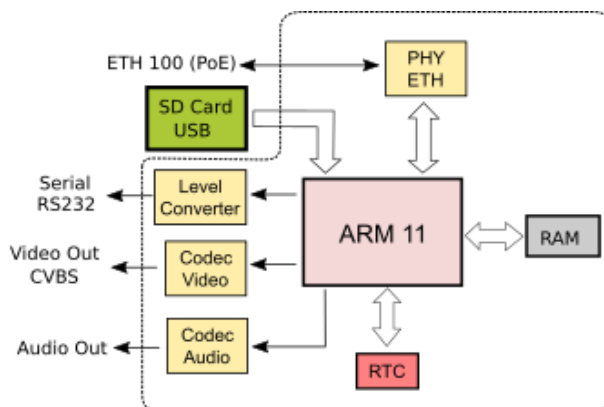
### DESCRIPTION

The VOD Server Crystal - ACT800 is entertainment equipment that offers movies and music on demand to passengers. It was specifically designed, qualified and supported for use in automotive applications. It has an ARM11 processor with 32bits and 1GHz of frequency. Also, it has a RAM with 512MB of memory, it being possible to have real time information as route and internet using an app in your mobile (tablets e smartphones).

### FEATURES

- Compact Design;
- Individual use with interface;
- Audio and vídeo reproduction;
- Wi-Fi (with access point);
- Internet (with external modem);
- GPS;
- APP Management (Android and iOS).

### BLOCK DIAGRAM



|        | By           | Date     | VOD SERVER<br>CRYSTAL –<br>ACT800 | Ref. ACTIA      | Index        |
|--------|--------------|----------|-----------------------------------|-----------------|--------------|
| Draw   | E. Viana     | 11/16/17 |                                   | <b>PRD10653</b> | <b>Rev02</b> |
| Verif. | G. Fernandes | 29/08/18 |                                   |                 |              |
| Appr.  | C.Dambroz    | 11/16/17 |                                   |                 | Pagina 1/3   |

**TECHNICAL DATA:**

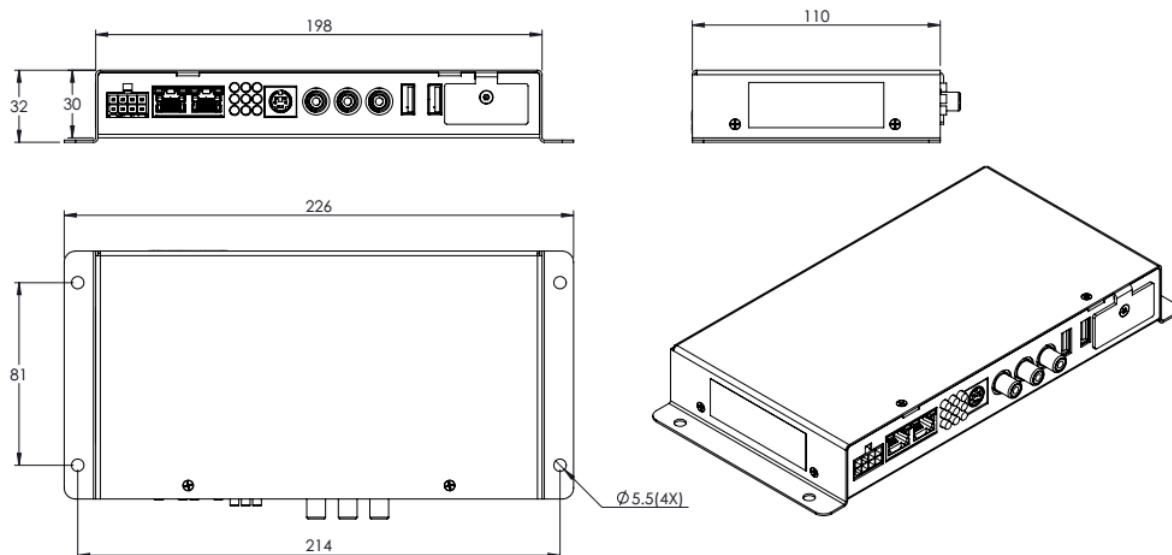
| PARAMETER                     | MIN   | TYP | MAX | UNIT |
|-------------------------------|---|-----|-----|------|
| Supply voltage range          | 9   | 24  | 32  | Vcc  |
| Power consumption (operation) | -   | 8   | 15  | W    |
| Operating temperature range   | -25   | -   | 70  | °C   |
| Degree of protection          | IP20  |     |     | -    |
| Inputs                        | 3 x USB, 2 x ETH/100 PoE, 1 x PS2, 1 x Video componente                               |     |     | -    |
| GPS                           | External module, PS2 connection, dimension: 65 mm x 45 mm x 22 mm, extension cable 5m |     |     | -    |
| UMTS/3G                       | External module   |     |     | -    |
| Processor                     | ARM11 32 bits @ 1GHz  |     |     | -    |
| Memory                        | 512   |     |     | MB   |
| Storage                       | SD Card   |     |     | -    |
| Storage requirement           | Class: 10, 16GB~128GB, SD, SDHC, SDXC   |     |     | -    |
| Access Point                  | 2,4GHz, 5GHz, MIMO, dimension: 139.7 x 86.7 x 25.75 mm, 802.11 bgn                    |     |     | -    |
| Weight                        | 350   |     |     | g    |

| RELIABILITY TESTS             |   |
|-------------------------------|---|
| Operating Temperature         | Method: 70°C to -20°C at rate of 1.5°C/min. (15min. each extremes).                                   |
| Thermal Shock                 | ANSI/ASAE EP455 - 5.1.3<br>-40°C to 70°C at rate of 4°C/min. (1 hour each extremes).                  |
| Humidity                      | SAE J1455 4.2.3 method 1<br>-40°C to 70°C @ 8 hours (not operational)                                 |
| Salt Spray                    | SAE J1455 – 4.3 (ASTM B117). 48 hours of application.   |
| Vibration, Random             | SAE J1455 – 9.4.4.2 8 hours each axis @ 50°C (5Hz to 600Hz).  |
| Shock/Crash safety            | ANSI/ASAE EP455 – 5.14.1<br>A single 11ms half sine pulse of 490m/s <sup>2</sup> on the function axe. |
| Overvoltage                   | 36V for 60min.  |
| Reverse Voltage               | ANSI/ASAE EP455 – 5.10.4  |
| Short circuit protection      | All inputs to Vdc, Ground and case for 1 hour.  |
| Starting Profile              | ISO16750- 2– 4.6.3  |
| Load Dump                     | ISO16750-2– 4.6.4<br>160V (+-10%), tr=0,1ms, td=100ms, Ua=28Vdc.                                      |
| Switching spikes - Transients | ISO7637-2<br>Pulse 1, 2a, 2b, 3a and 3b.  |

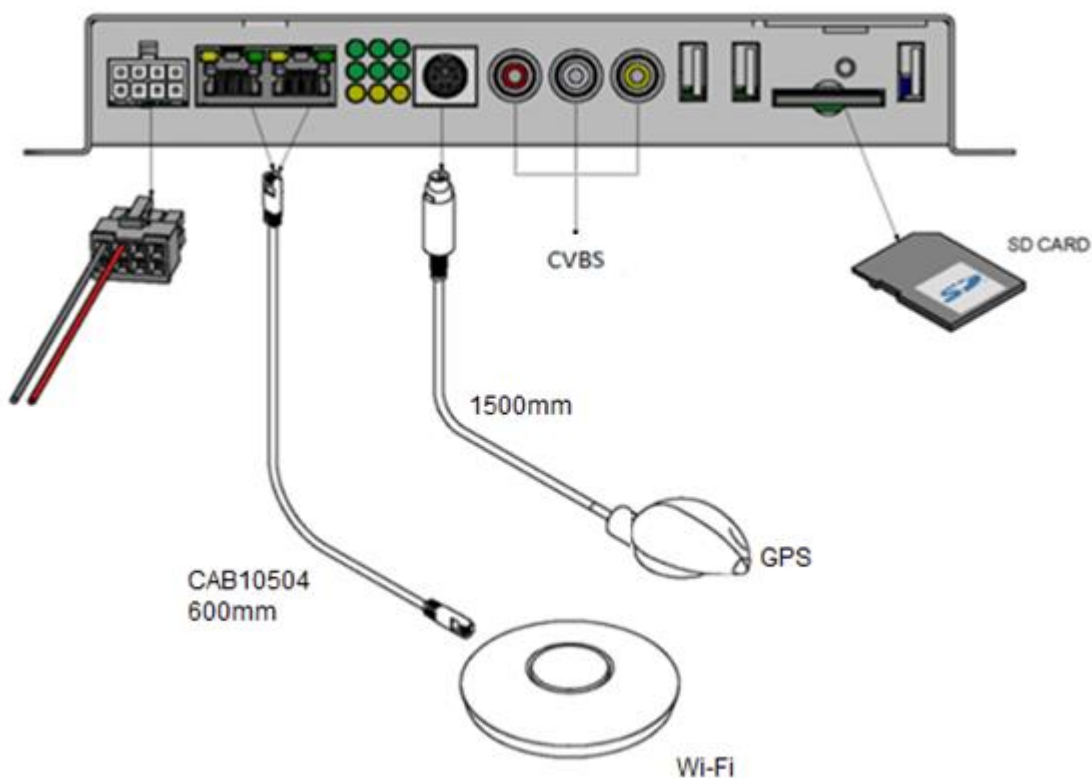
|  |   |
|--|---|
| <b>Superimposed alternating voltage</b>  | ISO16750-2– 4.4 - Severity 1, 2 and 3.    |
| <b>Discontinuities in supply voltage</b> | ISO16750-2– 4.6<br>Usmin with 100ms drop. |

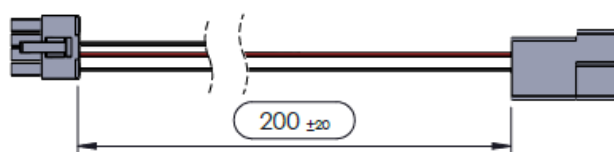
## DIMENSIONS:

(Millimeters)



## CONNECTIONS DETAILS:





Picture 1 – Supply cable

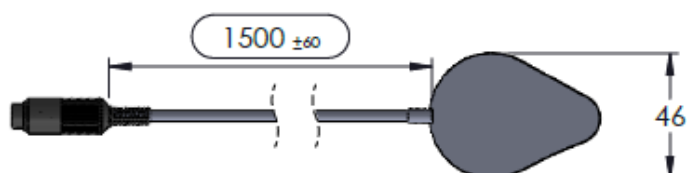
FASTIN-ON Male 2 WAYS

Positive (+)

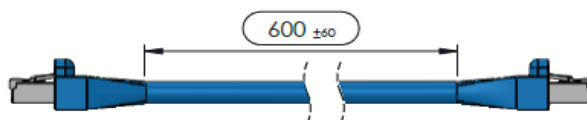
GND(-)



Figura 2 - Connector of the supply cable

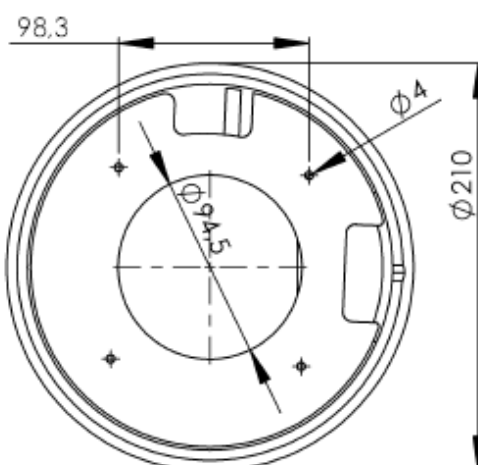


Picture 3 – GPS Antenna



CAB10504

Picture 4 – Cable to connect AP Wi-Fi



Picture 5 - AP Wi-Fi

## REVISION HISTORY

| <b>Rev</b> | <b>Date</b> | <b>Draw.</b> | <b>Descrição</b>                                      |
|------------|-------------|--------------|---|
| 02         | 29/08/18    | G. Fernandes | Chage size of the cables.<br>Removing signature field |
|            |             |              |   |