THE NEW WIRELESS HEART RATE MONITOR
WITH PUBLIC DISPLAY
BY ATRM SYSTEMS

Approved by the
FEI

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ATRM Systems, the leading company in automatic timing for endurance competitions, presents its new wireless heart rate monitor with public display.
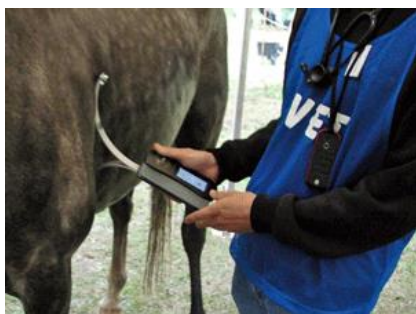

WHY A HEART RATE MONITOR ?

When traditionally taking the heart rate, the veterinarian finds himself both judge and party: he is the one who counts, the one who says. This is of course based on competence, trust and honesty, qualities that are not always enough to avoid some doubts among competitors.

THE NEW ATRM HEART RATE MONITOR:

- Frees the veterinarians from an ambiguous responsibility.
- Gives the competitors a warranty of absolute fairness.
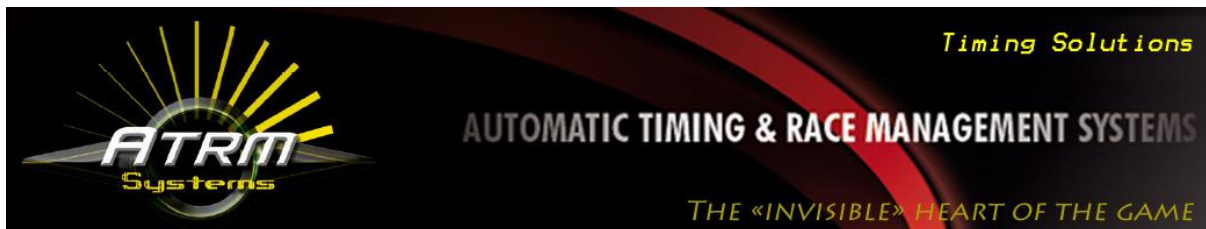
GENERAL CHARACTERISTICS:

- Detection and filtering of electrical impulses made by Polar, the undisputed leader in this field.
- New analysis system with advanced features developed by ATRM for the specific needs of endurance competitions.
- Fully consistent with the current wording of the FEI rules.

SPECIFIC CHARACTERISTICS:

- The detection module is completely wireless (for security reasons - eg avoiding rope burning danger - as well as the public display board.
- Autonomy for use during the longest events.
- Easy heart rate limit setting to adapt to different rules or Ground Jury's amendments.
- Detection of irregularities due to improper handling.
- Integration and suppression of nonrecurring "heart blocks".
- Detection of persistent irregular frequency (the screen of the module then reports a health problem and displays "VET" to let the veterinarians take over (once the full minute is over).
- Automatic recording of the history for each device at the Ground Jury's disposal for checking.
- Continuous analysis during the allotted minute until the emergence of a stable heart rate frequency.
- Automatic stop when a stable and acceptable frequency is obtained.
- In case of non-appearance of a stable frequency accepted by the rules, display of the last value found at the end of the allowed minute.
- Display of the only stable values found enabling the veterinarian to follow the different stages when the values are above normal.
- In the case of rapidly changing heart rate frequency two dashes replacing the digits are displayed until the detection of a new stable range is found.
- Rounding used suitable for endurance. Since the current formulation of international rules only recognizes integers, 64 999, for instance, is displayed 64 and not 65, which would be true if the usual mathematical rounding that requires 64.5 to be displayed 65 was implemented.
- The red/green led of the module shows the exact heart beats leading therefore to a useful visualization.
- Up to 4 different heart rate limits can be set up for different rides held simultaneously on the same day.

DETECTION MODULE

- Integrated touch screen for control and visualization readable even in bright sunlight.
- Direct display on the detection module allowing the veterinarian to keep eye contact with the horse and its behavior during the analyzing process.
- Time since the start of the analysis displayed under graphic and written forms on the touch screen.

When the module is used with the ATRM5 version of our automatic timing systems, the number of the horse, its name and its rider's automatically appears on the touch screen and the data is automatically processed and incorporated into the timing system (integration of the heart frequency, HR RI (Heart Rate Re-Inspection), etc.).
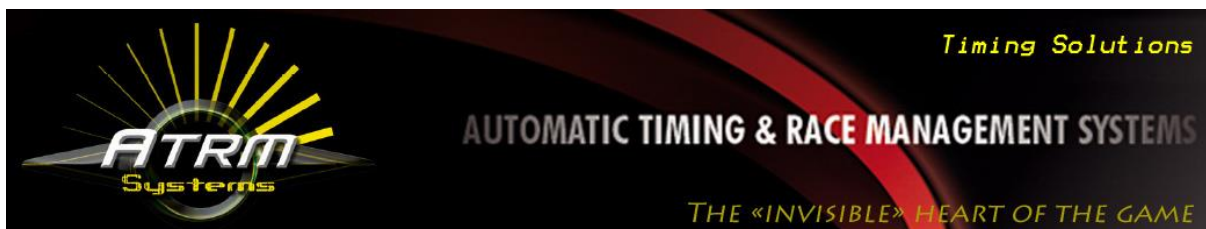
Public Display:

- Public display designed to suit the particular needs of reading in and around vet gates inspection areas.
- High brightness LED monitors easily read in the axis at more than 80 m in direct sunlight.
- Lateral reading without side angle limit with the use of adapted diodes and specific disposition.
- Adjustable power for successful reading under full sunlight as well as at night.
- Red/green color display to emphasize the nature of the results and create more suspense.
- Programmable persistence of the last data displayed to allow, for example, synchronizing with the trotting of the horse concerned.

Production:

The analysis modules and the public display boards are all designed and manufactured by ATRM. Detection, filtering and transmission of the resulting data are designed and manufactured by Polar®.

The units are waterproof and can be used in bad weather. Public display boards can be operated continuously without sunscreen up to 40 °C (under cover).

Spreading and Utilization:

The spreading and utilization of this system of heart rate monitor is through provision of service independent from any timing system, or in conjunction with one of our two automatic timing versions (ATRM "Classic" or ATRM5).

For information, special requests or for a quotation,

do not hesitate to contact us:

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SOME BENCHMARKS OF OUR ACTIVITY IN THE FIELD OF AUTOMATIC TIMING FOR ENDURANCE COMPETITIONS
Timing of more than 1 350 competitions (France, Belgium, Luxemburg, Spain, Portugal, Abu Dhabi, Dubai, Malaysia).
FEI Official Timekeeper on 8 World Championships, 3 European Championships.
4 220 results files under permanent free access on our website.