

Livestream Video & Data from Performance Horses, **Anywhere They Go**

Rajant's EquineView[™] provides a robust and fully mobile wireless networking solution to enable livestreaming and archiving of video, vitals, and locations of horses in competition, at rest, and at work in diverse disciplines.

The technology has broad applicability in giving you realtime, up-close views of horse health and performance: whether covering fast-paced equestrian events, streaming video from the horse's eye perspective, tracking their whereabouts as they graze, or monitoring their fitness as they work.

Envision the Applications

The shrinking size and diversity of smart sensors today provide near limitless opportunities for real-time monitoring and tracking, even of highly mobile animals like horses. At the same time, the next generation of broadcast television, based on Internet Protocol (IP), just like online video services, is bringing new opportunities to provide a more interactive and immersive experience to viewers.

EquineView enables horse owners, riders, and trainers, as well as equestrian event managers, to take advantage of these new technologies, providing a complete solution with the network mobility and bandwidth to support high-resolution livestreaming of data and video, without drops, even in motion and at high speeds.

Livestream, Televise, or Record from the Horse's Eye View

Using a small camera with pan, tilt, and roll stabilization mounted to the horse's bridle, EquineView can enable high-definition video from the horse's perspective, which can be streamed for live events and/or archived for later review and training purposes.

This provides a new and unique perspective to spectators of equestrian events both on-site or watching remotely, helping them feel part of the action. For example, during a race or polo match, viewers can go online and drill down to their favorite horse to see the competition from their perspective. Riders, owners, and trainers can also watch this footage after the event to understand the horse's performance and reactions to inform future training strategies.



Rajant provided its EquineView technology to broadcast the Pacific Coast Circuit Women's Challenge at Eldorado Polo Club in Indio, CA from the polo ponies' perspective.

Bring Connectivity to Cover Sprawling Equestrian Event Sites

Horse sports often take place in open areas where network infrastructure may not already exist. EquineView leverages Rajant's Kinetic Mesh® private wireless network technology, which is easily deployed as a standalone solution to instantly bring coverage to remote polo fields, winding steeplechase tracks, miles-long cross country courses, and more.

Now crowds at these events won't have to miss any of the action, as field tracking cameras can be implemented to video stream horses and riders as they move out of visual sight. The network is fully mobile, has built-in redundancy, and dynamically adapts as network elements like these cameras shift, so it can move with the action without any drops in coverages—even in hilly or topographically challenging areas.





Rajant's EquineView technology brought connectivity for live video broadcasting to Radnor Hunt Races, the 3rd largest steeplechase in the USA, held annually in a rural and hilly setting in Chester County, PA.

Improve Public Safety at Large Equestrian Events

The video and livestreaming capabilities of EquineView can also be used to enhance the safety and security of attendees at horse races and other large competitions, providing a secure, private connection for security cameras used by police and event staff. Such events draw large and often sprawling crowds, and Rajant's technology provides a solution to see across the event to identify potential public safety or security issues in real-time.



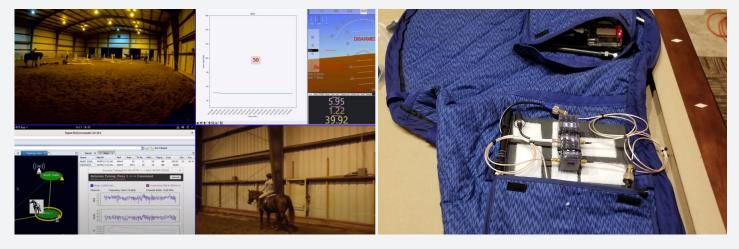


Rajant's EquineView solution provided secure, private connections for security cameras used by the Thames Valley Police during the Royal Ascot horse race in England, which draws crowds of more than 70,000 people.

Track Horses' Vitals in Real-Time

Health and fitness have major implications on the performance of any horse, and having the ability to understand changes in the horse's heart rate, respiration, and temperature while it is working can help riders and trainers tailor their training program for optimal results. EquineView can be paired with a saddle pad equipped with embedded sensors that measure vitals as well as speed, direction, and other variables. Measurements are delivered via the network for real-time viewing on devices and can be fed into programs that analyze the compiled data.

This enables data fusion that delivers a highly accurate view of the horse's stress levels, fitness, and more. Based on these insights, you can modify training approaches to better build to peak performance, and be alerted early to any health signals that may poorly impact the horse – to head off a sickness or serious injury *before* it happens.



EquineView can use custom saddle pads equipped with embedded sensors to measure and stream the horse's vitals for analysis while being ridden.



Track Horses' Locations in Real-Time

EquineView with GPS and motion sensors can also be used to monitor horses at rest, such as grazing in large fields that can encompass hundreds or even thousands of acres. This provides peace of mind even when herds are out of sight and allows you to track activity patterns that can help optimize horse management practices. Because of the flexible nature of Rajant's network deployments, connectivity to enable tracking can be easily established in remote areas of these fields.

EquineView:

The Technical Benefits

EquineView is powered by Rajant's Kinetic Mesh technology, a private wireless network with unique features that make it ideal for horse sports applications.



Built-In Redundancy and High Bandwidth

Every node in a Rajant network can hold multiple simultaneous connections over multiple frequencies, which provides hundreds of potential paths to direct traffic. This also increases the capacity of every transceiver to easily support bandwidth-intensive livestreaming of video and data from the horse and of high-paced equestrian events.



Self-Optimizing without Intervention

Kinetic Mesh uses Rajant's InstaMesh® networking software to dynamically evaluate and direct traffic over the best available path(s) at any given moment. As the network moves to follow horses over varied terrain, some paths may become blocked or unavailable. InstaMesh will adapt in real-time to redirect traffic over the next-best available link(s), so coverage never drops.



Fully Mobile Coverage

Rajant's network is the only wireless solution that does not operate from static configurations. The entire network can, therefore, seamlessly move with the action and location of the horse. In fact, Rajant's lightweight nodes can be deployed directly onto horses' saddle pads so they can take connectivity with them as they work or race.



From providing deeper insight into your horses' health and performance to creating a more unique and immersive experience for those watching horses perform, EquineView has you covered. Whether you are an event organizer, trainer, rider, or owner, Rajant will work with you to customize our solution for you and your horses' requirements.

Get in touch to learn more today:

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