

GoalCam/StadiumCam Camera System

We provided Toshiba cameras to Camera Corps for coverage of the 2010 World Cup in South Africa; the goal camera caused a sensation during the England team's defeat by Germany at Bloemfontein when 26 million viewers saw Frank Lampard's goal disallowed because the referee and his assistant had their attention elsewhere!

A key element of the system is that it can be brought to site, installed and dismantled much more easily than traditional heavyweight kit. It is also ideal for use in combination with one or more Polecam portable rigs.

The system consists of two Goalcams and one StadiumCam. Each camera incorporates a 1/3 inch CMOS HD-SDI imager allowing the use of ultra-wide-angle lenses with high corner resolution. Both GoalCams are fitted with 125 degree low-distortion lenses giving images of the entire goal mouth without the barrel distortion commonly experienced at such wide angles.

The StadiumCam is equipped with a 170 degree fisheye lens and, like the GoalCams, can deliver 1080i line resolution at 50/59.94hz. An optional down converter is available to provide SD-SDI output where required.

All three cameras plus two auxiliary cameras can be controlled from a single Polecam RCP remote control panel. The GoalCams and StadiumCam incorporate individual data receivers allowing full control of camera functions, including motorised iris adjustment.

The data signal can be sent along standard audio cable, over optical fibre or via a radio microphone link. Control data can also be embedded into, or extracted from, an HD-SDI stream.



GoalCam/StadiumCam Specifications

The System

- 3 x Toshiba IK-HRIS cameras
- All can be operated from Polecam's RCP (control up to 6 cameras!)

GoalCam

- 1/3" Cmos HD-SDI imager
- Fitted with 125 degree low distortion Theia lens
- Weather housing
- Adjustable Camera brackets
- Housing weight - 1.19kg
- Housing Dimensions - 188 x 70 x 75mm
- Brackets: 150 & 300mm
Bracket to housing: 55mm
Rope/Tape to bracket: 112mm

StadiumCam

- 5 megapixel 1080i Line resolution
- 170 degree Fish eye lens
- Weight - Less than 1/2kg
- This system comprises of 3 x Toshiba IK-HRIS cameras. The two Goalcams are fitted with Theia 125° low distortion lenses and the Stadium Camera is fitted with a 170° Fisheye lens.
- The cameras are 1/3" single chip CMOS HD-SDI 1080i 50/59.94hz switch-able cameras. Being single chip allows the use of ultra wide angle lenses with excellent corner resolution. A small cost effective down converter (~£400) can also be used to give SD-SDI signals where required.
- All 3 cameras are controlled by the Polecam RCP which can in fact control up to 5 cameras from the one panel. Each camera has a data receiver for total camera control as well as being fitted with a motor for direct iris control. The data signal can use standard audio cable or can even be sent wirelessly over an ordinary radio mic with no modifications to the signal. The signal can also be embedded and de-embedded into the HD-SDI video stream and converted to fibre.

- The Goalcams are mounted on a special bracket equipped with a weather housing, available in white or carbon fibre effect. These fully adjustable brackets allow the camera to be positioned in the corner of the net and will re-stabilise quickly after the net has been hit.
- The mount is also hung from just one point so that it can move out of harms way if hit by a player keeping the health and safety people happy at all times (if that's possible!).
- The 125° degree lens allows the entire goal to be seen even when cropped from 16:9 to 4:3 thus enabling the commentators to report accurately if a ball has indeed crossed the line. Sorry Frank!
- Additional data sheets are available for Cameras, Lenses and the RCP MKIII.
- The GoalCam housing weighs 1.19kg & is 188 x 70 x 75mm
- Brackets; 150 & 300mm, Bracket to housing 55mm, Rope/Tape to bracket 112mm
- The Stadium camera can be positioned anywhere. Weighing a fraction of what has been used in the past (less than 1/2kg - a cup of coffee!). In the roof, at the halfway line in the corner of the stadium, its 5 megapixel 170° lens shows the entire crowd and stadium. Due to its weight it can be easily slung anywhere secured with a 'Magic Arm' and a small safety chain. Again, the health and safety people are much happier with this 'small' secure weight slung over the crowds.
- You can also add two more cameras to the system for example in the players tunnel and in the dugout! and still only use 1 x RCP panel saving on 'retail space' in the engineering truck.

