

Countering forecourt theft with CCTV and vehicle number plate recognition

Forecourt Security is a continuing concern to petrol retailers despite recent indications that forecourt crime might be stabilising. This is not simply because of the continuing high levels of theft or attempted theft from petrol stations, but because of the growing complexity of the security issues that affect forecourts. This reflects their evolution into general retail stores, 'the corner shop', their extended opening hours and often, a vulnerable location, whether rural, suburban or urban.



Typical problems most frequently cited by forecourt staff include:

- Drive-offs – the practice of drivers filling up and simply driving away without paying
- Abuse of staff by customers or others
- Theft of merchandise from forecourt shops
- Illegal activities such as drug dealing that can take place in poorly lit areas of the premises

As with many CCTV installations the primary objectives are to protect staff and products, provide a visible deterrent to prevent crime, and give customers the confidence to shop. In the last resort, they provide evidential quality images should a crime be committed.

Northfield Trial

Shell is currently trialling a new CCTV installation, supplied by Norbain at one of its forecourts in Northfield, Birmingham. The total installation comprises ten cameras, two monitors, and a ten channel Digital Video Recorder (DVR).

Five of the cameras are positioned in the shop to monitor the till area and various views of merchandise. These five colour cameras are connected to a 14" colour public display monitor. Outside there are five further cameras, including three domes, monitoring vulnerable areas around the shop including the cash machine.

Alex Doorduyn, Business Development Executive - Strategic Accounts at Norbain SDL explains further:

"Two domes on the shop fascia are programmed to be on a permanent tour of the forecourt, moving to preset positions programmed to monitor the pumps. We have found that by this method all vehicle number plates are recorded. The third dome is at the rear of the store to cover the car wash, car park at the side and the rear of the shop. This dome is vandal resistant and capable of withstanding any abuse it may receive.

"There is also a VNPR camera positioned to cover the exit and designed purely for recording all vehicle number plates as they leave the forecourt, not simply those that have visited the pumps. Experience tells us that not all criminals visiting forecourts

politely park at the pumps! The majority of the internal cameras are housed in Dennard domes so that customers do not know the direction in which they are pointing. This makes the cameras more discrete and we believe, more effective."



VNPR Benefits to Forecourt Security

- Captures registration details at speeds of up to 100mph
- 24 hour a day operation
- Once captured, number plate registrations are retrieved in seconds
- Combined with overview cameras, the VNPR system provides additional supporting evidence (such as who's driving, number of passengers)
- Reduces crimes such as 'drive offs' by acting as a deterrent
- Low maintenance system that's virtually plug and play
- Easily expandable, even over multiple sites

In the control room – a small office to the side of the till area – resides the second monitor and the 10-channel Columbus hard disk recorder. This has a 160Gb hard disk capable of storing up to approximately 21 days of 24 hour recording.

Alex Doorduyn of Norbain concludes:

“Countering forecourt theft is complex. It requires installers to apply the full weight of their experience to specify the correct combination of products - positioned wisely - to ensure maximum impact. In Norbain, the installer and end customer have the ideal partner to help them succeed in reducing and eliminating the opportunity for crime.”