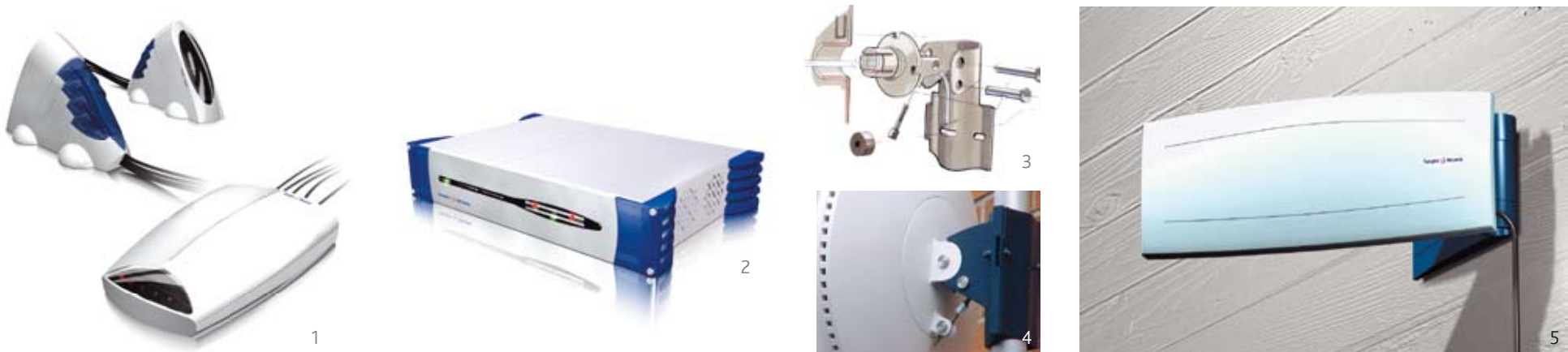


Corporate product styling

- Modern and unobtrusive aesthetics
- Co-ordinated 'family' image
- Forms developed to minimise perceived size
- Materials, colours and finishes chosen to suit both internal and external products
- Manufacturing and assembly processes selected to achieve challenging cost targets
- Designed for rapid installation
- 3D CAD surface and solid modelling
- Physical modelling and rapid prototyping





Broadband wireless communications provide services such as high speed internet 'always on' connectivity, video conferencing and high-speed data transfer.

PipingHot Networks are a privately owned start-up company, backed by a syndicate of leading internationally recognised high-technology venture capital companies. The design of the company's first products was vital in achieving success and rapid growth in the market place.

Selected because of expertise and experience in the datacoms sector, DCA was asked to develop a co-ordinated image for a range of internal and external products targeted at both SOHO (small office/home office) and SME (small medium sized enterprise) users.

Initially, sketch ideas were created to stimulate a creative discussion between DCA's design team and the client engineering and marketing teams. The requirements were then refined and a direction agreed. The next stage of the project involved the visual development of a shortlist of ideas, involving careful consideration of technical specifications. Not compromising the performance of the communication devices was obviously of prime importance.

The design of the larger of the two antennas was possibly the greatest challenge. Achieving a fast time to market necessitated the client firming up on the configuration of the internal hardware, construction of the raydome and the position of the patches in advance of DCA developing the forms and visual detailing. The marketing need however necessitated several challenges to the engineered solutions. The final design satisfied both sets of requirements and allowed the overall programme to be kept on track.

A further interesting aspect of the development of the larger antenna was finding a solution for a fixing method. The goal was for installation to be achievable by one man perched on a ladder and within a very limited amount of time. The units needed to be attached either directly to a wall or pole and to allow easy alignment with the nearest mast head antenna. Adjustment was required on both the horizontal and vertical axis and be capable of being rotated 90° around its frontal axis. DCA's solution was a multi-functional bracket with features allowing single handed adjustment of the angles.

DCA progressed various aspects of the design of the various units by producing visual models, fully detailed 3D CAD models of the

external mouldings for the large antenna and prototype parts for the SME internal unit. The models were used for making presentations to potential customers and for display at major exhibitions both in mainland Europe and the US.

"PipingHot Networks pride themselves at their competence and excellence in designing radio frequency systems. Accordingly, it was vital that the image presented to the market by our integrated Consumer Premises Equipment followed this trend of excellence and innovation. It is a mark of DCA's ability to follow their brief that the design they produced provoked so much interest when displayed at exhibitions; we could have sold it many times over."

Grant Grafton, Operations and Sales Director, PipingHot Networks

1. CAD rendered concepts for SOHO internal unit
2. SME internal unit
3. Early fixing bracket concept
4. Quick-fit adjustable mounting bracket
5. Residential antenna