

## Solutions Overview

MDC1000 Digital Infrastructure Platform offers versatility and flexibility for operators. It will receive inputs from satellite, cable, terrestrial, IP and ASI to output onto local distribution networks of co-axial, UTP or fibre to reach end-user devices. Using existing infrastructure to enable multi-play services, it avoids the need for labour-intensive and costly infrastructure modification.

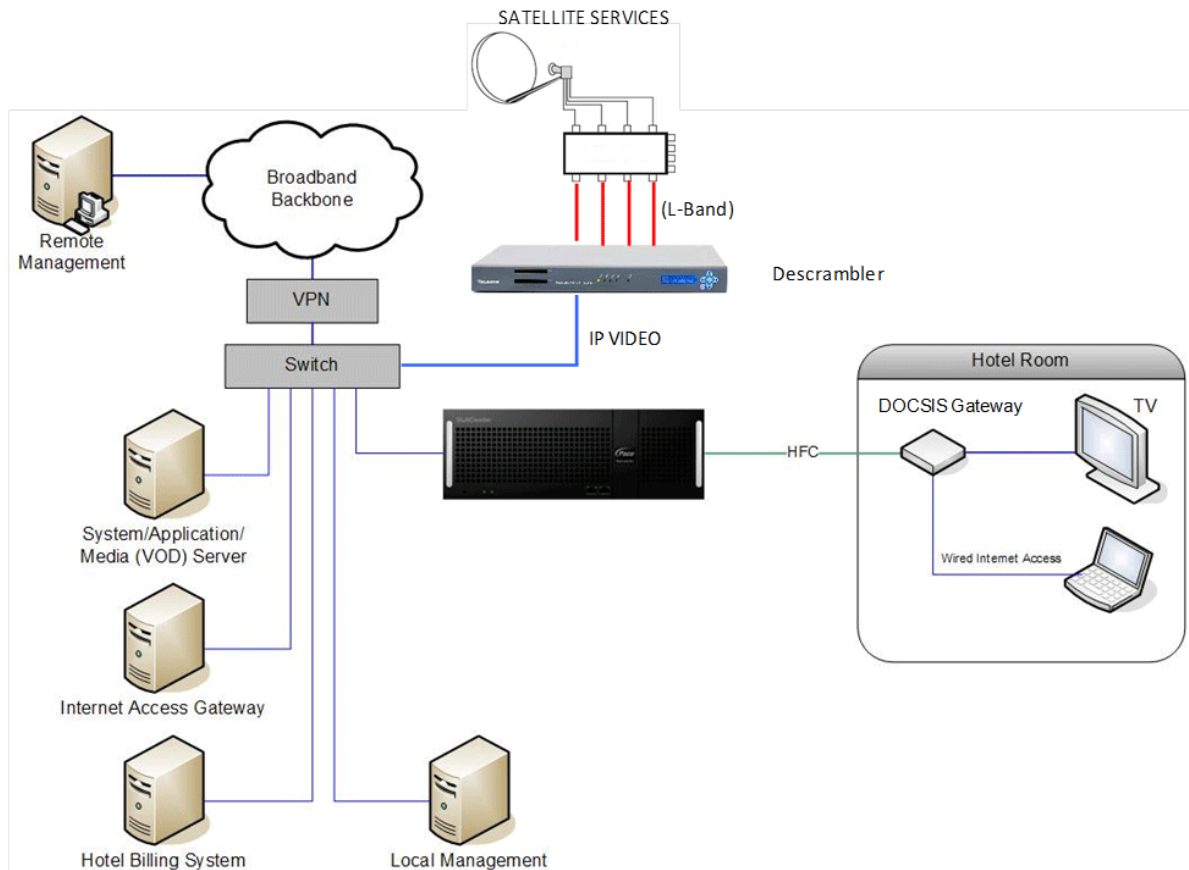


For delivery of high bandwidth digital services to small and medium sized groups of users, MDC1000 will support a broad range of input and output formats, enabling operators to extend subscriber reach and increase the breadth of subscriber services.

Acting as a mini head-end to integrate digital video distribution and data capabilities at a fraction of the cost of other solutions, it enables cable operators to ensure a high quality user experience in emerging technologies such as high definition and over the top services.

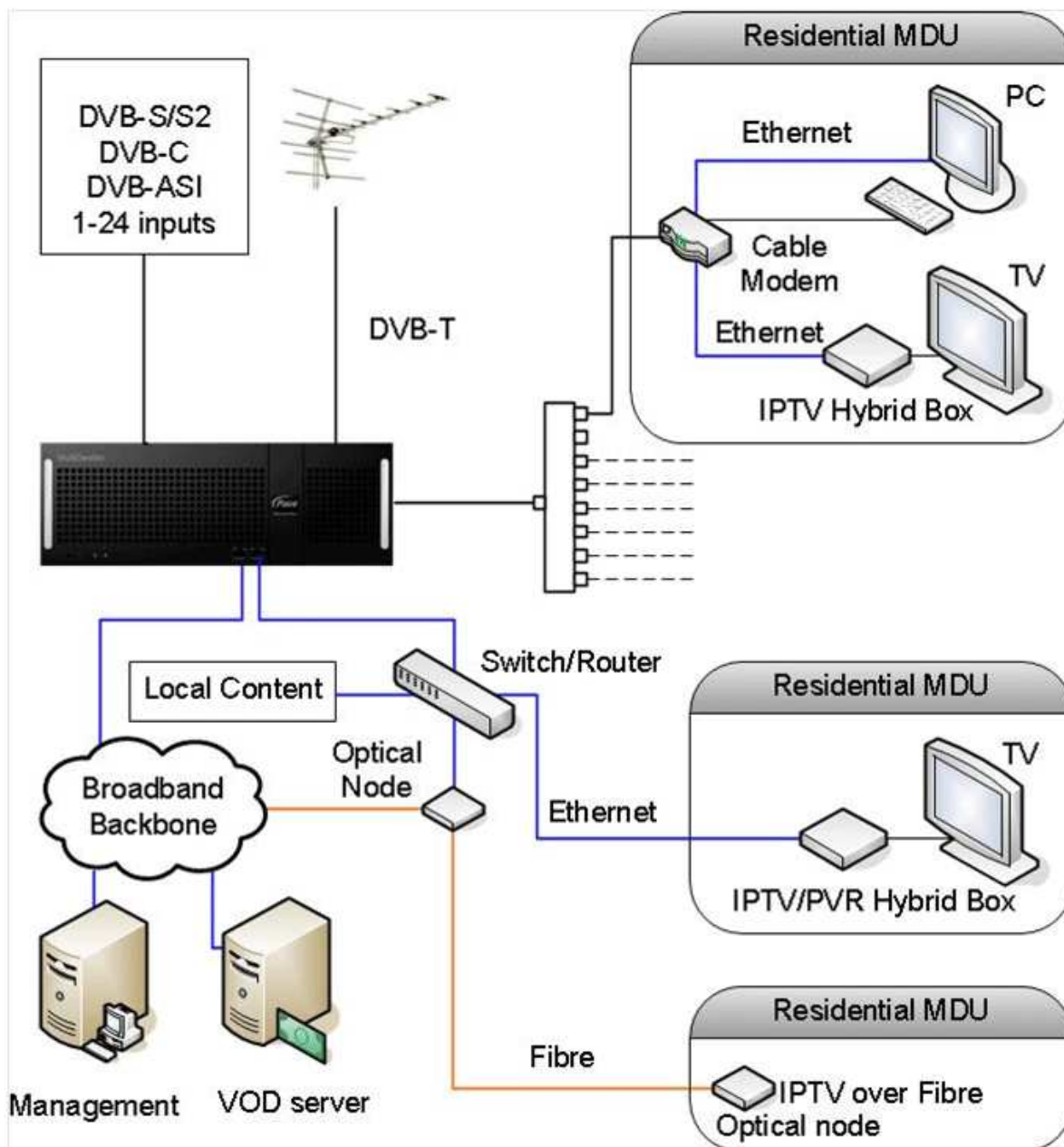
## CMTS

For broadband services it is ideally suited to smaller communities of subscribers where a traditional CMTS is simply too expensive. MDC1000 supports smaller footprint installations from up to 400 cable modems and beyond. It offers a compelling return on investment case for operators targeting low-volume subscriber communities. With automatic configuration and remote management capabilities that simplify installation and set-up, it offers reduced maintenance expenses and a low total cost of ownership.

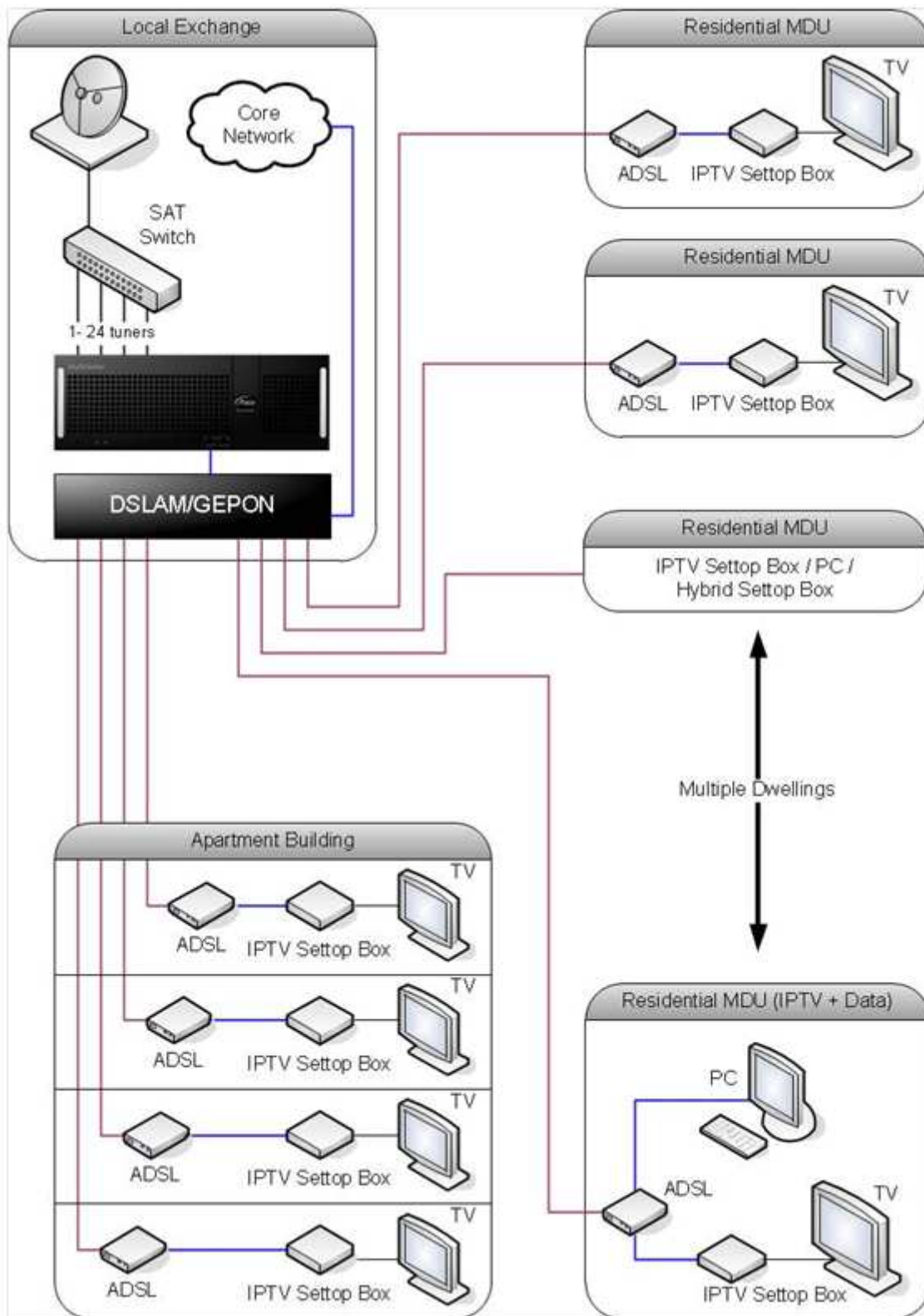


## IPTV Head End

Extensive choice and individual selection of video content are becoming the norm as Internet content and IP-based video distribution pervades the home and the community. Driven in large part by the near-ubiquitous IP-based communication infrastructure, the TV experience has extended to embrace many of the additional services provided by web applications, and promises to deliver a world of content and services to “any device, anywhere, anytime.”



A cost-effective IP encapsulation platform, the MDC1000 enables operators to leverage growing IPTV revenues which are projected to reach \$46bn by 2014, re-packaging digital video and IP inputs into an RF signal to the millions of users worldwide who have already invested in the next generation cable modem and IP enabled set-top boxes.



Content is adapted close to the point of consumption by the subscriber community, which may be a remote village, small town or a multi-dwelling residence. This reduces the load on the main IP backbone, by receiving content in its native analogue or digital format, converting it to digital content in an IP format based on the EuroDOCSIS open standard, and transmitting it over the local network which may be co-axial, fibre or CAT5.

## Transmodulation

A cost-effective transmodulator, the MDC1000 transmits digital video content to subscribers served by a common infrastructure, from satellite, cable and terrestrial broadcast sources, as well as internet content, to the cable set-top box.

It will convert satellite and terrestrial channels into cable based channels, and combine with high speed broadband and VoIP for a triple play package into homes without the need for any modification or additional cabling.

With increasing competition for subscribers and the availability of new services such as HDTV, service providers are differentiating their service offerings by creating bespoke content packages that combine feeds from satellite, cable and terrestrial sources.

MDC1000 features “smart” trans-modulation – a facility that changes the mode of transmission without affecting the content, allowing the operator to select the services required from several input feeds, and deploy as a packaged serviced over the desired QAM channels to be seamlessly integrated at the point of delivery to the end user.

With increasingly high bandwidth services such as HD and even 3-D content, operators need an infrastructure that can ensure that these services can be properly managed. To support this requirement, Link Quality Manager scans the network, selects the most appropriate output frequencies and performs ongoing background quality checks on the output QAMs, for optimal transmission quality.

With SNMP support for remote management, enabling remote configuration, debugging and maintenance operators can ensure quality of service standards and minimize total cost of ownership.

By distributing digital content over existing co-axial cabling MDC1000 offers a compelling alternative to extending high-cost fibre networks or leasing additional Ethernet capacity, and is particularly suitable for:

- enclosed multi-dwelling environment such as apartment blocks and gated communities etc.
- geographically remote locations
- communities where customers may be unable to gain direct access to satellite services.

