

## TECHNICAL SPECIFICATIONS

### PMT handling

- ① Handles multiple PMT
- ② Handles 2 PMT simultaneously
- Fully compliant with all PMT handling commands set out in EN 50221 (ONLY, ADD, REMOVE, DELETE, FIRST)

### Filtering

- ① Up to 96 filters shared between EMM, ECM and ES for descrambling

### Descrambling

- ① Handles 128 PIDs, 64 of which are encrypted (depending on the CAS) in a DVB CSA transport stream or 16 3DES or AES PIDS and 32 pairs of control words
- ② Descrambling capacities of 10 PIDs (in 2 services) in one transport

### Smart card

- Compliant with ISO 7816-3 T=0 (including PPS negotiation)
- Ultra fast drivers for high speed smartcard processing (4.9 MHz)

### Standard

- Plug & Play
- DVB Common Interface standard (EN 50221)
- Compatible with DVB MPEG2 & MPEG4, SD/HD/3D: satellite, terrestrial, cable, IP

### OSD

- Supports "EN 50321 low level MMI" graphic mode
- User-friendly, hierarchical OSD
- OSD available in 10 languages (Dutch, English, Finnish, French, German, Italian, Portuguese, Russian, Spanish, Swedish)
- Parental control (if this function is integrated in CAS)

### Update

- Updated via USB in less than 5 seconds
- Updated via satellite in less than 1 minute
- No service blackout during updates

### Conditional Access

- The most commonly used Conditional Access Systems are available

### Security

- ② Compatible CI+ v1.3
- Secure loader
- Compression and encoding algorithm based on RSA 256 octets and AES 128 bits
- Secure upgrade
- Each CAM module is linked to a unique conditional access system. The Conditional Access System cannot be modified
- Flash memory protected from hacking
- Unique and protected serial number
- Hardware cryptographic accelerator
- Secure chipset: to prevent card and control words sharing

### Processor

- Maximum stream rate supported: 96 Mb/sec
- Dual Core Mips 4Kec @ 300 MHz
- ① 32 decryption keys to descramble up to 64 PIDs (depending on CAS)
- ② 10 decryption keys to descramble up to 10 PIDs

### Electrical specifications

- 5V power supply
- Low energy consumption: less than 500mW
- Flash: 4 MBytes
- RAM: 64 Mbytes

### Physical specification

- PCMCIA type 2

① Professional CAMs

② Consumer CAMs

**DVB**  
Digital Video  
Broadcasting

Powered by **aston**

151, avenue Galliéni  
93177 BAGNOLET Cedex FRANCE  
[www.aston-france.com](http://www.aston-france.com)

ASTON NEW GENERATION  
OF PROFESSIONAL AND CONSUMER CAMS:

SECURE CI/CI+ 1.3 CAMS  
WITH NEVER SEEN FEATURES!



**aston**



For over 15 years, Aston Professional and Consumer CAMs have been the reference on the international market for their reliability. Capitalising on its unequalled experience and expertise, Aston has developed a new generation of secure and innovative CI/CI + 1.3 CAMs, offering services that are entirely new to the market!

These new CAMs are equipped with an exclusive Aston hardware platform. This platform's technological capabilities ensure a level of performance never achieved before, along with exclusive features, particularly in descrambling capacity, speed of operation and steady in use.

# WHY CHOOSE ASTON'S PCMCIA CAMS

## SECURE PROFESSIONAL CAMS

### THE HIGHEST DECODING CAPACITY ON THE MARKET

Aston CAMs support a stream rate of 96 Mb/sec and are able to manage up to 128 PIDs, 64 PIDs of which are encrypted. This performance allows them to decode up to 16 channels simultaneously!

To match professionals needs, Aston CAMs are also available in 8 and 12 channel versions.

### ASTON INNOVATION! USB UPDATE

The integration of a USB Ready function into the module means easier and faster updating (- 5 sec).

In addition, satellite update is also available. With a 256 kb/sec stream rate, updating takes less than 1 minute. In both cases, there is no service blackout during the update.

### POWERFUL AND RELIABLE CAMS

The start-up speed of Aston CAMs is renowned and appreciated. Start-up time is very short: the CAM responds to each descrambling command in 0.5 seconds which means a start-up in 4 seconds for 8 channels and in 8 seconds for 16 channels.

Powered by a 4Kec @ 300 MHz Dual Core processor, Aston CAMs are also suitable for intensive 24h/24 use.

### CUSTOMIZABLE CAMS

Due to the extent of Aston's expertise, new Conditional Access Systems can be integrated in less than 2 months.

### RENOUNDED AND EFFICIENT CUSTOMER SUPPORT

Aston provides professionals with dedicated technical support, renowned for its high quality service and able to respond to customers' requests in less than 48 hours.

### MENUS IN 10 LANGUAGES

Aston CAMs user interface is available in 10 languages: Dutch, English, Finnish, French, German, Italian, Portuguese, Russian, Spanish and Swedish.



## CI+ 1.3 SECURE CONSUMER CAMS

### SECURE CAMS

Aston Consumer CAMs are compatible with the broadcasting of secure content and prevent card sharing.

### CI+ 1.3 COMPATIBLE CAMS

Standard CI+ 1.3 integration offers enhanced possibilities for content security and guaranteed compatibility with the security options found in the most advanced Conditional Access Systems.

Aston CI+ 1.3 CAMs also manage the Operator Profile (maintaining the operator numbering and its channel list) and revocation lists.

As for the CI+ 1.3 consumer CAMs, ASTON is ahead of the competition.

### ASTON INNOVATION! USB PVR READY FUNCTION

**NEW:** Aston CAMs are equipped with a USB PVR Ready function. Users may therefore connect an external hard drive to record their favourite programmes. They also can watch one channel and record another simultaneously on the same transponder. The USB PVR Ready function also allows simplified updating of the CAM in less than 5 seconds, without service blackout.

### CUSTOMIZABLE CAMS

Aston can adapt its range of CAMs to operators' specifications and requirements: secure or non-secure CAMs, CI or CI+...

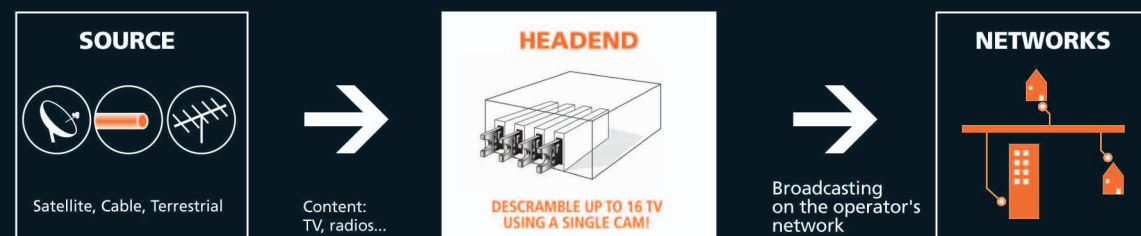
### MENUS IN 10 LANGUAGES

Aston CAMs user interface is available in 10 languages: Dutch, English, Finnish, French, German, Italian, Portuguese, Russian, Spanish and Swedish.



Powered by **aston**

## OPTIMIZE YOUR DESCRAMBLING CAPACITY



## RECEIVE YOUR ENCRYPTED PACKAGES DIRECTLY TO YOUR TV:

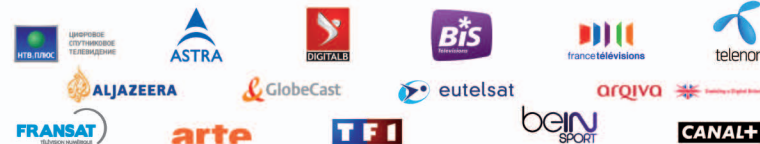


- A single remote control required: the one you use for your TV
- Use your TV's user interface
- No additional wire needed
- Channel lists updated automatically

### CAS PARTNERS



### OPERATORS PARTNERS



### MANUFACTURERS PARTNERS



### SOFTWARE PARTNERS

