PRODUCT OVERVIEW

**Problem:** Wireless ISP Provider wants to offer IPTV signal broadcasting to rural areas. The IPTV signal have to be encrypted for Digital Rights Management (DRM) protection and should be distributed via cable or wireless (WiFi or WiMax). The solution should support 20 channels and should be low priced.

**Solution:** Sysmaster Corporation offers IPTV Broadcast Station that is a single 1U server with 20 channel encoding capacity and DVB-S/S2, DVB-T/T2,, ATSC, IP, DVB-C signal input. The output signal is encrypted and can be send to the subscribers using wireless or wired connection. In addition, this solution includes AirStream technology to distribute IPTV streams to unlimited number of wireless subscribers in broadcast format.

**20 SD channel support**

IPTV Broadcast Station supports hardware encoding capability for 20 SD channels in real time. The signal input can be virtually in any digital or analog format. The output uses the most efficient H.264 video codec.

**DVB-S/S2, DVB-T/T2,, ATSC, IP, DVB-C signal input**

IPTV Broadcast Station offers flexibility for input signal type. It supports DVB-S/S2/T/T2/C formats. Once the packets are captured, they are transcoded into H2.64 video format and send out via IP using wireless or wired connection.

**AirStream support for wireless distribution**

IPTV Broadcast Station supports AirStream technology to allow wireless broadcast to unlimited number of subscribers. The technology can use Wifi or Wimax bandwidth. It does not require two-way connection which means that wireless amplifiers can be used to extend the area coverage. The AirStream technology

**Wired Ethernet distribution support**

IPTV Broadcast Station supports also Ethernet distribution type to unlimited subscribers in multicast format. The system has built-in authentication and encryption procedures for secure IPTV distribution.

**Support for VOD service**

IPTV Broadcast Station support VOD file distribution with authentication and encryption functionality. In addition the server can rotate VOD files to create virtual endless IPTV channels.

**Includes CellNode M100N or CellNode BRAP-N hardware**

IPTV Broadcast Station includes a hardware bundle with CellNode M100N or CellNode BRAP both using the 802.11N 2.4Ghz standard. Since two-way connection is not required providers can use wireless amplifiers to amplify the signal to the subscribers thus extending the area coverage.

**Encrypted signal for DRM protection**

IPTV Broadcast Station has an advanced SSL 128bit AES encryption with DRM protection and Forward Error Correction control. The stream cannot be decoded without specific keys that are frequently changed.

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**KEY FEATURES**

- 20 SD channel support
- DVB-S/S2, DVB-T/T2,, ATSC, IP, DVB-C signal input
- AirStream support for wireless distribution
- Wired Ethernet distribution support
- Support for VOD service
- Includes CellNode M100N or CellNode BRAP-N hardware
- Encrypted signal for DRM protection
- Forward Error Correction control
- Support for basic billing content plans
- Automated Access Control
- Does not require network infrastructure
- Featured low entry price
- Bundled with inexpensive STB devices
Forward Error Correction control
IPTV Broadcast Station includes a FEC function to ensure that wireless packet losses do not interrupt the signal processing and do not reduce the signal quality. The FEC information ensures that WiFi distribution type has sufficient quality for professional service support.

Support for basic billing content plans
IPTV Broadcast Station supports basic billing plans to allow access of subscriber groups to specific content (such as standard and premium content). All content can be grouped in different content plans based on the subscriber billing type.

Automated Access Control for subscribers
IPTV Broadcast Station supports PIN based automated access control to ensure that subscribers cannot watch channels after their balance is used up. In addition, one PIN cannot be used for more than one account concurrently thus allowing “evil twin” signal capture.

Does not require network infrastructure
IPTV Broadcast Station does not require specific network infrastructure as it can receive satellite DVB-S signal, convert it, and simply send it out Wirelessly using AirStream technology. This allows easy implementation in areas where network infrastructure is not readily available.

Featured low entry price
IPTV Broadcast Station has a low price tag to allow extremely low price per subscriber. The system does not have any license or bandwidth restrictions for multicast and AirStream signal distribution.

Bundled with inexpensive STB devices
IPTV Broadcast Station allows usage of inexpensive SD STB devices with special Wifi or Wimax receivers (dongles). Since two-way wireless communication is not required, these devices are in receive only mode and provided that they receive the IPTV signals they should operate without serious issues. The devices can also capture multicast signal and play VOD files using Ethernet connection.

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