

IPTV (UDP or RTP/UDP) multicast/unicast  
high-speed output bitrate with Back  
Panel input streamer

**3DGFLEX Evo**

## 3DG-BP-IPOUT

**IPTV**



The new **3DGFlex Evo** professional headend introduce many innovative features.

**Extreme flexibility!!** One of the most innovative features of the new generation modules is the **"Smart&Pool"** function: all the new modules inserted on the same 3DG-BOX exchange between them bidirectionally the contents through the very high-speed Back Panel interface (up to 1Gbit/s bidirectional).

In this way each new 3DG "Evo" module is able to manage the signals coming from all the other new modules inserted into the same 3DG-BOX, with the advantage of being able to create flexible configurations, optimizing the number of elements of the system, especially in case of complex installations.

By using the IPTV multicast new generation encoder (**3DG-BP-IPOUT**) in addition to a new 3DG "Evo" receivers (for example **3DG-4S2-BP**) is possible to stream over the "IGMP multicast" ethernet network the UHD, HD or SD programs received and decrypt from the receivers and available through the high speed bidirectional Back Panel (i.e. **"Smart&Pool"** feature").

### NEW FEATURES !!

- **Session Announcement Protocol (SAP):** if enabled, the streamer send the service discovery table through the network for easy use of VLC player or similar
- **M3U:** if enabled the function, the streamer send the service discovery table in standard M3U through the network for quick set-up of Set-Top-Box IPTV channel list (depending from IPTV Set-Top-Box model)

**NOTE:** the product is ready for the future implementation of new features (for example, the integration of content protection systems - **DRM**)

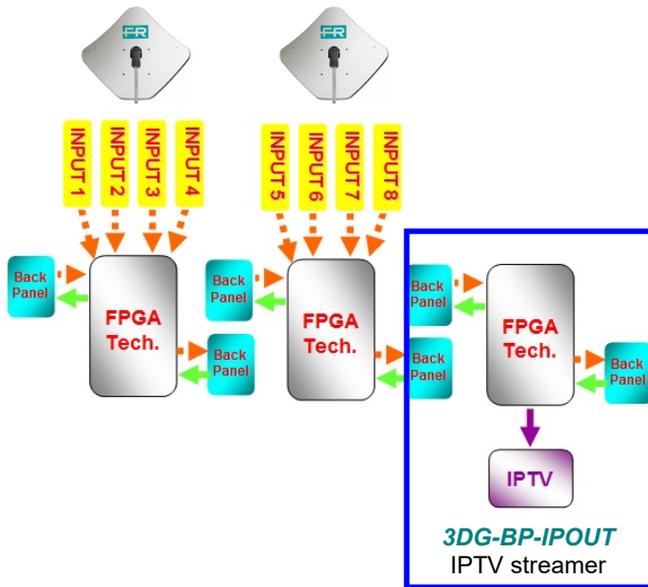
## Main Specifications (\*)

- **New “Smart&Pool” contents management feature:** it's possible to manage up to 1Gbit/s bidirectional data throughput between all the **new generation modules** inserted into the same 3DG-BOX subrack.
- **NEW FEATURES: SAP** announcement services and **M3U** playlist file creation for easy check and set-up.
- **Very high IPTV multicast output bitrate:** up to 1Gbit/s multicast (UDP, RTP/UDP) output useful bitrate available on every module
- Up to **64 IP Multicast address group available** for each module
- Single-Program Transport Stream (**SPTS**) and Multi-Program Transport Stream (**MPTS**) program management
- **WEB interface based headend: today is even more intuitive.** The headend setup, and configuration must be done by using the improved web interface built-in; basic setup available by on board keyboard.
- **Status & Monitoring:** through the web interface is possible to easily check the parameters of every single IP multicast address and program
- **3DGFlex-Evo backwards compatibility:** in this way it's possible to maintain the old modules or use the new modules into the same 3DG-Box
- **USB Port** to upload/download pre-setted set up or for the firmware upgrade on the module.

		3DG-BP-IPOUT (*)
Fracarro code		283164
<b>IPTV output</b>		
LAN interface		IEE 802.3ab 1Gbps ethernet (10/100/1000)
Standard		DVB-IPTV (ETSI TS102034_v1.5.1)
Incapsulation		UDP, RTP/UDP
Protocols		SAP, IGMP, M3U, DHCP
Multicast address group		Up to 64 (unicast o multicast)
<b>Back Panel Input/Output</b>		
Maximum bitrate	Mbit/s	1000 (bidirectional)
Connector		48 pin on back-panel
<b>General features</b>		
Power consumption	W	5
Connectors	Tipo	USB (FW upgrade, configuration files)
Dimensions (L. x W. x H.)	mm	245x208x54
Operating temperature	°C	-5 ÷ +50
Compliant		The full text of the EU declaration of conformity is available at the following internet address: <a href="http://ce.fracarro.com">http://ce.fracarro.com</a>

(\*)Definitive specifications may change without notice.

## 3DG-BP-IPOUT Block Diagram and Example



The new **3DG-BP-IPOUT** encoder is able to manage a very high speed IPTV multicast traffic (up to 1 Gbit/s) coming from the Back-Panel and streams all the selected UHD, HD, SD or Digital Radio programs through the Ethernet network (**NOTE: the Ethernet network must obligatory support the IGMPv2 or higher traffic**)

**WARNING.** The Ethernet network dimensioning must be developed to consider even the additional IPTV multicast traffic generated by IPTV streamed programs.

The Back-panel interface allows to share the contents with the new generation modules inserted in the same 3DG-BOX.

The **3DG-BP-IPOUT** new generation module can be used in addition with one or more **3DG-4S2-BP** new satellite receivers in order to stream the Free To Air or Encrypted contents coming from the Satellite signal (see picture on the left side).

All settings can easily be made through 3DG-BOX by using the integrated WEB INTERFACE.



Example: 3DGFlex Evo headend composed by 2pcs of **3DG-4S2-BP** quad DVB-S2 receivers and 1pc of **3DGBP-IPOUT** IPTV streamer