



IP Production Switcher without Compromise.

CarboniteIP | Interface Solutions

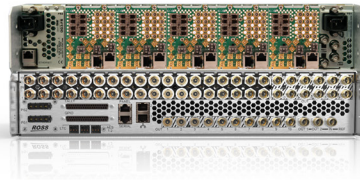
Carbonite Black, the world's most popular and powerful mid-size production switcher, is available with AIMS-compliant IP options to interface to standards-based SMPTE ST 2110 and ST 2022-6 infrastructures. This allows Carbonite to seamlessly integrate with modern IP facilities. By specifying the IP input/output option, there is no compromise on I/O capacity, and all input and output processing features are retained, including AuxKeys, MiniME, Frame Syncs, Format Converters and HDR processing.

CarboniteIP interfaces with industry-standard control solutions, ensuring clean integration into your overall production workflow solution. Connectivity to COTS IP fabric is provided via standard 10GbE SFP+ or 100GbE QSFP28 interfaces.

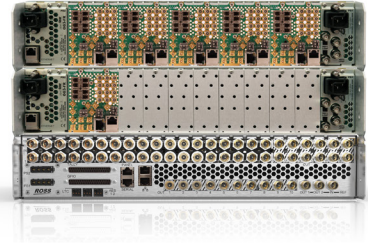
FEATURES

- Robust IP Interface built upon Raptor EDGE technology
- SMPTE ST 2110 and SMPTE ST 2022-6 support
- Open control brings freedom of choice to use your preferred control system, including seamless integration into the Ross control ecosystem and 3rd-party systems via:
 - NMOS IS-04/IS-05
 - EmBER+
 - Published JSON API
 - Ross' DashBoard™
- Audio and video SMPTE ST 2059 alignment and synchronization, and to video production engine
- No loss of switcher I/O capacity and I/O processing capabilities
- Includes everything required to interface Carbonite to COTS IP fabric
- Intelligent integration of IP metadata into switcher setups and user interface
- Each input and output may be independently configured for SDI or IP interfaces, ideal for hybrid applications and low-cost monitoring

CarboniteIP | Packages



CBF-IPIO30



CBF-IPIO36

PACKAGE	CBF-IPIO30	CBF-IPIO36
# INPUTS	30	36
# OUTPUTS	25	25
TOTAL SIZE ¹	4 RU	6 RU
IP INTERFACE	10 x 10GbE or 1 x 100GbE	12 x 10GbE or 2 x 100GbE

¹ Size includes switcher frame and IP Aggregation Modules.

CarboniteIP | Specifications

VIDEO FORMAT SUPPORT

- 720p 50 / 59.94 / 60
- 1080i 50 / 59.94 / 60
- 1080p 50 / 59.94 / 60
- 2160p 50/59.94 Quad Link 2SI

IP INTERFACE STANDARD SUPPORT

- SMPTE ST 2022-6, -7
- SMPTE ST 2110-10, -20, -30, -31, -40
- AES67
- PTP (IEEE-1588 / ST 2059)

IP INTERCONNECT

- 100GbE or 10GbE Ethernet connections
- Support for redundant IP core connection

CONTROL AND SETUP

- Full integration of IP stream IDs with switcher mnemonics
- Gateway setup via Ross Dashboard
- NMOS IS-04, IS-05 and IS-06
- RAVENNA Session Announcement, Discovery, and Registration
- Native EmBER+ integration for control from popular VSM routing controller

