

FEATURES

- *Specifically developed for DVB-T2 COFDM with high dynamic range*
- *Dynamic gain control for optimal RF reception*
- *UHF input filter protects against <1 GHz interference from UHF communications and data transmissions*
- *Wide dynamic range and low noise*
- *High gain, flexibility, and frequency stability*
- *Ability to pair with up to eight downconverters with a BSI's single Real Freedom Receiver*
- *Supports a Real Freedom Data Transmitter with a single cable*
- *Compatible with BSI's Real Freedom Fiber system*

General Description

The Real Freedom Downconverter is a key component of BSI's Real Freedom wireless camera system. It receives signals in the broadcast transmit band and down-converts them to a UHF signal of between 50 MHz and 850 MHz. The UHF signal is then fed to a receiver via a coaxial cable.

Available in a range of frequency bands, the downconverter allows the receive antenna to be remotely located away from the Real Freedom Receiver by up to 150 meters. Up to eight downconverters may be paired with a single receiver. The Real Freedom Downconverter is also fully compatible with BSI's Real Freedom fiber system for long distance remote operation to receive points in the network.

Plug and play connectivity with a Real Freedom Receiver enables access to the downconverter's advanced features. This includes the automatic configuration of receiver settings for optimal performance.

One of the most unique and beneficial features of the Real Freedom Downconverter is the ability to connect and power a Real Freedom Data Transmitter with a single cable via any downconverter within the system. This connectivity provides complete access to camera control from the receiver, allowing you to operate without compromise, locating components in optimal positions without deploying additional infrastructure or cable.

It offers some advanced and unique features with high gain, flexibility, and excellent frequency stability. Designed to be compact and fully weatherproof, the downconverter can be temporarily installed almost anywhere or permanently on the roof of an OB van. The downconverter comes with a removable pole clamp and 1/4"-20 fitting.

As the manufacturing source, experienced engineers and field technicians are available to quote you on the product needs. You'll find the best prices as all our Real Freedom products are manufactured in house.

For further details and pricing, contact the Broadcast Sports International representative in your region. For more information about the Real Freedom Downconverter, see <https://www.bsintl.com/>.



TECHNICAL SPECIFICATIONS | Real Freedom Downconverter

RF

| | |
|---------------|----------------|
| RF Connector | N (F) 50 Ohm |
| UHF Connector | BNC (F) 75 Ohm |
| Noise Figure | <3 dB |
| O1P3 | >25 dBm |
| OP1dB | >12 dBm |

Gain

| | |
|-----------|------------------------|
| Model No. | Gain |
| IDC-1015 | TBD |
| IDC-2027 | 26 to 44 dB (variable) |
| IDC-3239 | 26 to 44 dB (variable) |
| IDC-6475 | Variable |

Downconverter Frequency Band Options

| | |
|---------------|---|
| Connectors | Via fiber connector or LEMO 0K 2-pin |
| Aux DC Supply | 9-36V DC (Required for >2km Fiber Length) |
| LED | Green - Power On Comms OK Red - Fault No Comms |

Physical

| | |
|---------------|--|
| Size (WxHxD) | (2.95 x 5.47 x 1.14) in (75 x 139 x 29) mm |
| Weight | 1.8 lb. / 0.82 kg |
| Environmental | Weatherproof to IP67 14° to 149°F / -10° to + 65° C |
| Mounting | Pole clamp with 1/4" x 20 fittings |

LO

| | |
|------------------|----------------------|
| Model No. | LO |
| IDC-1015 | TBD |
| IDC-2027 (2 GHz) | 2834 MHz (High Side) |
| IDC-3239 (3 GHz) | 4030 MHz (High Side) |
| IDC-6475 | TBD |

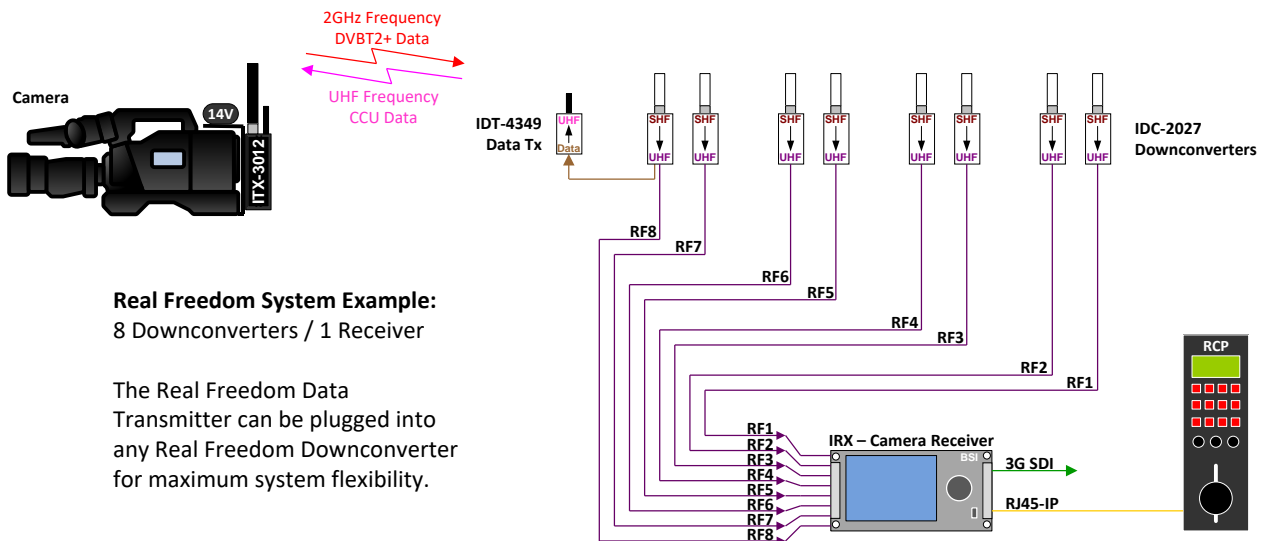
I/O and Power

| | |
|-----------|------------------------|
| Model No. | Gain |
| IDC-1015 | TBD |
| IDC-2027 | 26 to 44 dB (variable) |
| IDC-3239 | 26 to 44 dB (variable) |
| IDC-6475 | Variable |

Compliance

| | |
|-----|---|
| FCC | 47 CFR 15B |
| CE | EN 60950, EN 301 489-28/1, EN 302 064-2 Standards |

NOTE: Specifications are subject to change without notice.



Real Freedom System Example: 8 Downconverters / 1 Receiver

The Real Freedom Data Transmitter can be plugged into any Real Freedom Downconverter for maximum system flexibility.