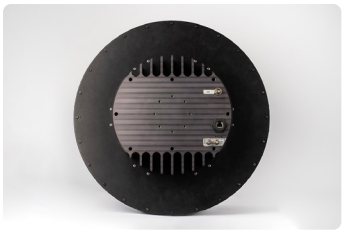
VISLINK

RECEIVER

CIRAS-X6

Central Integrated Radome System
6-Way MaxRC COFDM Receiver



A completely new concept in central receive systems, the CIRAS-X6 receiver combines a six-way high gain antenna system with the latest diversity receiver technology, in one easy-to-install package. It offers innovative RF performance in a durable IP66-rated outdoor housing. It is particularly well suited to helicopter video downlink and electronic newsgathering operations, as well as any application where ease of operation and reliable reception are required.

The CIRAS-X6 system automatically optimizes the receive signal, virtually eliminating all human intervention. In contrast to old highly directional antennas, the CIRAS-X6 employs multiple antenna elements arranged to cover 360°of azimuth in overlapping sectors.

Operational efficiency in signal acquisition is improved by a focused approach to integration and optimization of the antenna design, use of adaptive digital signal processing (ADSP) and maximal ratio combining (MRC) techniques. Formerly these three areas have been treated and controlled independently.

By combining and optimizing these areas, Vislink provides a new class of fully autonomous Central Receiving Systems that provide significant value and efficiency to the industry. The CIRAS-X6 features a compact, lightweight rugged IP rated chassis, making it equally suited to rooftop, tower, vehicle, or portable applications. The CIRAS-X6 uses Ethernet for control and power as well as providing an MPEG Video Over IP transport Stream, eliminating the need for expensive RF and control cables. The CIRAS-X6 sends the MPEG Transport Stream by Ethernet cable to a local decoder, video management system and/ or a network distribution center. Smaller, less expensive cables minimize installation costs. Interference from strong signals from nearby transmitters getting into RF cables is eliminated. The small radome and light weight make it the perfect receiver to use with pneumatic masts on emergency vehicles.

All CIRAS-X6 functions are monitored and controlled through an intuitive Web GUI. No standalone control system is required. Select the channel, and the CIRAS-X6 automatically detects the bandwidth, modulation, spectrum, and encryption keys. Designed for use with adaptive digital signal processing (ADSP) and maximal ratio combining (MRC) techniques.

Key Features

- Six input maximal ratio combining diversity receiver
- Six vertical polarized antennas with 14 dBi per panel gain for 360° receive
- Two up-look antennas (optional)
- Integrated 2:6-way diversity COFDM receiver
- Adaptive digital signal processing (ADSP)
- Rugged polycarbonate radome (IP66)
- Power Over IP
- eLink dedicated controller decoder
- IP Streaming of MPEG TS
- Web GUI

Typical Applications

- Law Enforcement
- Airborne downlink
- Central receive
- Command vehicle receive
- Surveillance, firefighting, SWAT, public safety, and homeland security

Options

- AES Decryption (BCRYPT)
- TSM-2020 StreamView
- TSM-2020 Video Media Server
- Tactical Kit
- Multi-Channel Simultaneous Receive (2x)

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CIRAS-X6 Datasheet

Technical Specifications	
RF Performance	

Base Model Number	Frequency (GHz)	Power Consumption (W)
18/23CIRAS-X6	1.700 to 2.400	20
23CIRAS-X6	2.025 to 2.484	20
47CIRAS-X6	4.400 to 5.000	25
65CIRAS-X6	6.425 to 6.525	25
70CIRAS-X6	6.425 to 7.150	25

Note: Not all bands may have been tested for FCC compliance. Please consult your Vislink representative.

Tuning Step Size	250 kHz step size - standard 100 kHz step size - optional
Demodulation Modes	
Modulation 1	• Formats: COFDM (DVB-T) • DVB-T: Support all GI, CR, and Modulation • Carriers: 2K • Bandwidth: 6, 7, 8 MHz Auto-detected
Modulation 2 (Optional)	• Formats: COFDM-NB • Carriers: 2K • Constellation: QPSK • Code Rate: 1/2, 3/4 • Guard Interval: 1/32 • Bandwidth: 2.5 and 1.25 MHz Auto-detected
Diversity	
Channels	6 channel Maximum Ratio Combining
System	
Decryption	(Optional) AES 128 / 256-bit BCRYPT 1 and BCRYPT 2 (FIPS PUB 197)
Control	Web control
User Data	Serial over Ethernet (UDP
Ethernet	• Stream TSoIP UDP/RTP • RTSP • Unicast and multicast
Connectors	
RJ-45	• Ethernet • Fiber Optional
Power Requirements	
Power Input	Power-over-Ethernet
Fiber Option Power Input	Two pin Amphenol
DC	+9 to +32 VDC
Standard Acccessories	• Power Supply • Mounting Kit • Ethernet Test Cable • Ethernet Lighting Protection Box

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Physical Characteristics	
Size	13.7″ H x 11.7 D″ (34.8 cm x 29.7 cm)
Weight	20 pounds (9.07 kilograms)
Environmental	
Temperature Range	Full specification: –30° to +60° C (-22 to 140° F) Ambient
Storage	–40° to +80° C (104° to 176° F)
Humidity	0 to 95% non-condensing
Ingress	IP-66

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