
PROFESSIONAL BROADCAST





VTQ IRD so einfach wie auch elegant.

Es lassen sich problemlos alle VTQ Professional Empfänger miteinander oder mit einem Pro RX ASI erweitern.

Das **IRD** läuft in jedem Pro RX autark, sodass ohne Setup eine unendliche Anzahl an Empfängern zusammengeschaltet werden kann.

Bei dem Zusammenschalten ergeben sich keine messbaren Differenzen und somit kommt es zu keinem Delay.

Das Umschalten von einem Empfänger zum folgenden erfolgt ohne Unterbrechung.

Das **IRD** ist ideal zum vollständigen Abdecken der Signale auf Rennstrecken, Studioverbund mit Etagensituationen oder Indoor/Outdoor Konstellationen.

- **IRD** - AROUND THE WORLD -

*The **VTQ IRD** is straightforward as it is elegant.*

*You may effortlessly interconnect all VTQ Professional Receivers and expand the network with every **Pro RX ASI** Receiver.*

*The **IRD** is self-sufficient for every Pro RX, so that an infinite number of receivers can be interconnected without any setup. When hooking-up the receivers, there are no timing differences, consequently there is no delay.*

Even the switch from RX to RX takes place without interruption.

The IRD is ideal for completely covering signals on Racetracks, in Studio environments with multiple floors or indoor-to- outdoor constellations.

- **IRD** - AROUND THE WORLD -

VTQ Drahtlos-Kamera Hitachi

Eine integrierte, vollwertige DVB-T - COFDM Funkstrecke, welche die Formate der Hitachi - Kameraserie unterstützt.

In Kooperation mit Hitachi.

Des Weiteren ist eine bidirektionale, digitale FSK-Funkstrecke integriert, um alle Kamerakopfdaten und RCP-Befehle in beide Richtungen senden zu können.

VTQ Wireless-Camera-Adapter

An integrated, high-quality DVB-T-COFDM Radio Link, which supports the formats of the Hitachi Camera Series.

In cooperation with Hitachi.

Plus, a bidirectional, digital FSK-Radiolink is integrated which transmits all camera head and remote control data both ways.

Die ARRI Amira Drahtlos-Lösung

Eine vollwertige Bildfunk- aber auch Datenfunkstrecke, um die ARRI Amira in eine drahtlose Broadcastkamera zu wandeln.

In Zusammenarbeit mit ARRI.

Durch diese Erweiterung werden nicht nur die hervorragenden Bildeigenschaften der Amira robust und drahtlos übertragen, sondern auch sämtliche Steuermöglichkeiten der Kamera realisiert.

ARRI Amira Wireless Solution

A sophisticated video and data link has the ARRI Amira completely prepared for every broadcast environment.

In cooperation with ARRI.

This enhancement does not only support the robust wireless transmission of the brilliant picture quality the AMIRA provides, but the entire remote control features of the camera as well.

VTQ V-Mount oder G-Mount allround DVB COFDM

Drahtlos-Kamera-Lösung. Der Sender kann an alle gängigen Broadcastmodelle angedockt werden und überträgt mit einer Latenz von 22 ms bei einer Sendeleistung von bis zu 200 mW alle üblichen Formate.

VTQ V-Mount or G-Mount allround DVB-T COFDM

Wireless Camera Solution

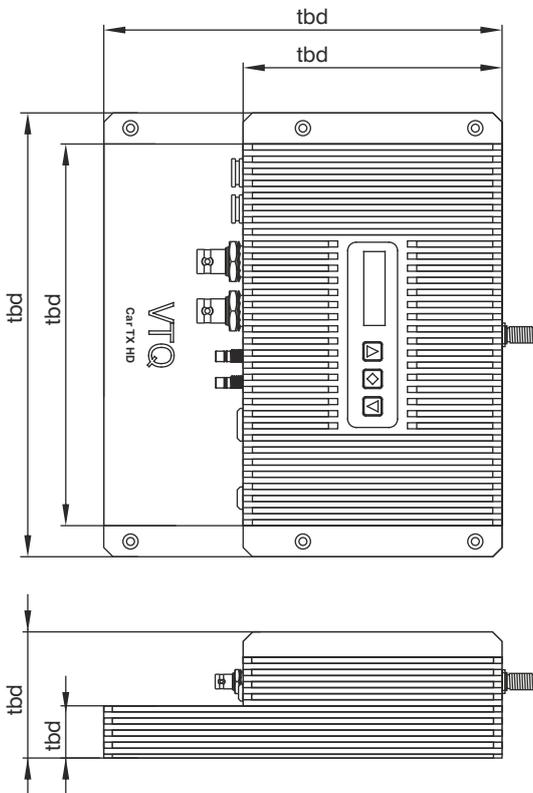
The transmitter is compatible with all current broadcast camera types and features a latency of 22ms and an RF output power of up to 200mW while supporting all common video formats.



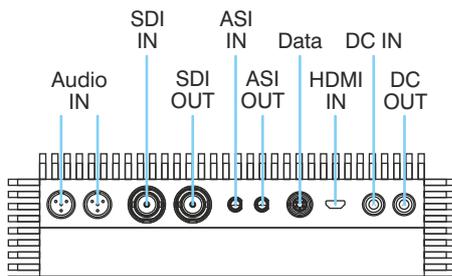
Pro Mobile TX

- + Vollausstattung // *fully equipped*
- + SDI IN / OUT
- + ASI IN / OUT
- + HDMI IN
- + RS232 embedded
- + RS485 remote

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

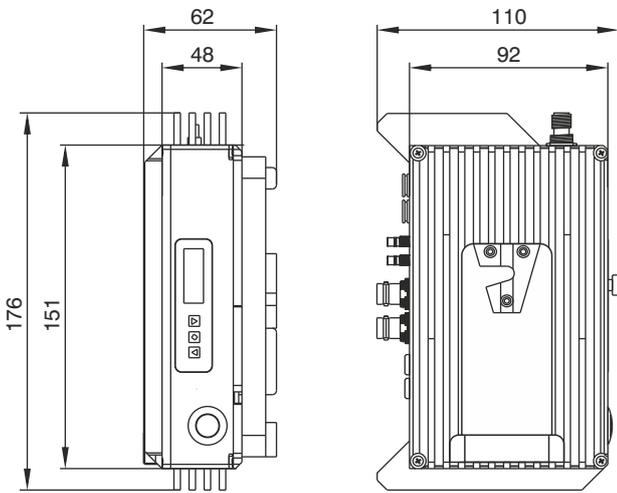
HF VIDEO	
Frequenzbereiche und Sendeleistungen // <i>Frequency ranges and transmission power</i>	300-470MHz: 200mW
	800-900MHz: 200mW
	1000-1500MHz: 200mW
	1500-2000MHz: 200mW
	2000-2700MHz: 200mW
	3000-3700MHz: 200mW
	4400-4800MHz: 200mW
	4800-5500MHz: 200mW
	5500-6000MHz: 200mW
Modulation // <i>Modulation</i>	COFDM (QPSK, 16QAM), (64QAM optional)
Bandbreite // <i>Band width</i>	4, 5, 6, 7, 8MHz (1.25, 2.5MHz optional)
Verzögerung // <i>Delay</i>	22ms depend on mode
Kompression // <i>Compression</i>	H.264 (embedded audio)
Videoformate // <i>Video format</i>	1080i50/59,94/60
	1080p23,98/24/25/29,97/30, 1080psf23,98/24/25/29,97/30
	720p23,98/24/25/29,97/30/50/59,94/60, 576i50, 480i59,94/60
RS232	embedded
Verschlüsselung // <i>Encryption</i>	AES / 3DES
PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // <i>Power supply</i>	9 - 40V DC
Leistungsaufnahme // <i>Power consumption</i>	13W (@ 200mW)
Temperaturbereiche // <i>Temperature ranges (andere auf Anfrage // others on request)</i>	
Betrieb/Lagerung // <i>Operation/Storage</i>	-10°C - +50°C / -20°C - +55°C
Abmessungen // <i>Dimensions</i>	tbd.
Gewicht // <i>Weight</i>	tbd.
ANSCHLÜSSE // CONNECTORS	
SDI IN	BNC
SDI OUT	BNC
ASI IN	SMB
ASI OUT	SMB
Audio IN	3-pol. Mini XLR
Data (Audio, RS232)	6-pol. LEMO
HDMI	Micro HDMI
RF OUT	SMA
DC OUT	3-pol. LEMO
DC IN	3-pol. LEMO



Cam TX

- + HDMI IN
- + SDI IN / OUT
- + ASI IN / OUT
- + RS232 embedded
- + RS485 remote
- + Power OUT für externes Telemetriemodul
Power OUT for external telemetry module
- + aktiv oder passiv gekühlt // *active or passive cooling*

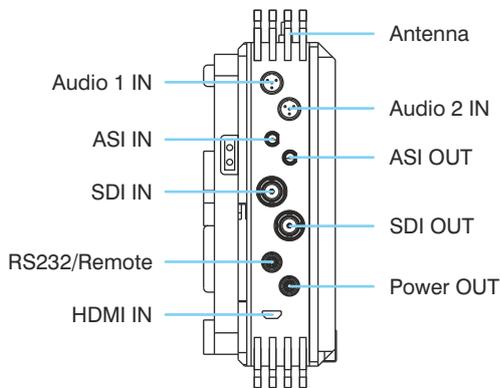
Abmessungen // Dimensions



Technische Daten // Technical details

HF VIDEO	
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Kompression // <i>Compression</i>	H.264 (embedded audio)
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	1080p23,98/24/25/29,97/30, 1080psf23,98/24/25/29,97/30
	720p23,98/24/25/29,97/30/50/59,94/60, 576i50, 480i59,94/60
RS232	embedded
Verschlüsselung // <i>Encryption</i>	AES / 3DES

Anschlüsse // Connectors



PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // <i>Power supply</i>	9 - 40V DC
Leistungsaufnahme // <i>Power consumption</i>	13W (@ 200mW)
Temperaturbereiche // <i>Temperature ranges</i> (andere auf Anfrage // <i>others on request</i>)	
Betrieb/Lagerung // <i>Operation/Storage</i>	-10°C - +50°C / -20°C - +55°C
Abmessungen // <i>Dimensions</i>	135.7 x 137.6 x 15.5mm
Gewicht // <i>Weight</i>	600g

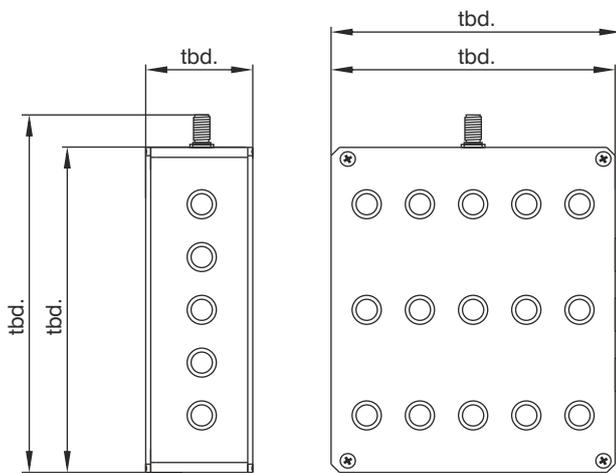
ANSCHLÜSSE // CONNECTORS	
SDI IN	BNC
SDI OUT	BNC
HDMI IN	Micro HDMI
ASI IN	SMB
ASI OUT	SMB
Audio IN	4-pol. Mini XLR
RS232/Remote	6-pol. LEMO
Power OUT	3-pol. LEMO
RF OUT	SMA



Cam Telemetry

- + Protokolle // *Protocols*:
SONY, HITACHI, IKEGAMI, THOMSON (GV)
- + diverse 3/8" Aufnahmen zur Montage //
3/8" holes for mounting
- + für Einsatz in Kamerastudio, Drohnen, Seilkamera
etc. // *for operation in camera studios, with drones,
rope cameras eg.*

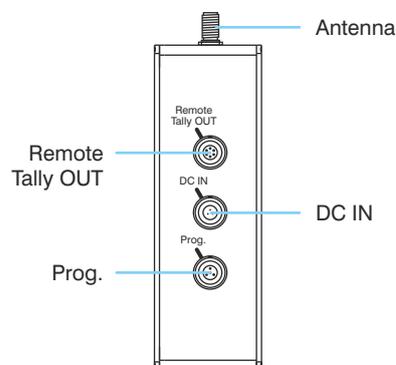
Abmessungen // *Dimensions*



Technische Daten // *Technical details*

HF	
Frequenzbereiche // <i>Frequency ranges</i>	868/869MHz 446-460MHz
Sendeleistung // <i>Transmission power</i>	25mW (HF) 500mW (HF)
Modulation // <i>Modulation</i>	FSK, ASK, GFSK, MSK
Adressen // <i>Address</i>	255
Datenrate // <i>Transmission rate</i>	1.2-200kBaud
Empfindlichkeit // <i>Sensitivity</i>	-112dBm - -86dBm (abhängig von Baudrate und Konfiguration // <i>depends on baud rate and modulation</i>)
PROTOKOLLE // <i>PROTOCOLS</i>	
Protokolle // <i>Protocols</i>	SONY, HITACHI, IKEGAMI, THOMSON (GV)
PHYSIKALISCHE EIGENSCHAFTEN // <i>PHYSICAL CHARACTERISTIC</i>	
Spannungsversorgung // <i>Power supply</i>	9 - 40V DC
Leistungsaufnahme // <i>Power consumption</i>	4W (@ 500mW)
Temperaturbereiche // <i>Temperature ranges</i>	(andere auf Anfrage // <i>others on request</i>)
Betrieb/Lagerung // <i>Operation/Storage</i>	-10°C - +50°C / -20°C - +55°C
Abmessungen // <i>Dimensions</i>	tbd.
Gewicht // <i>Weight</i>	tbd.

Anschlüsse // *Connectors*



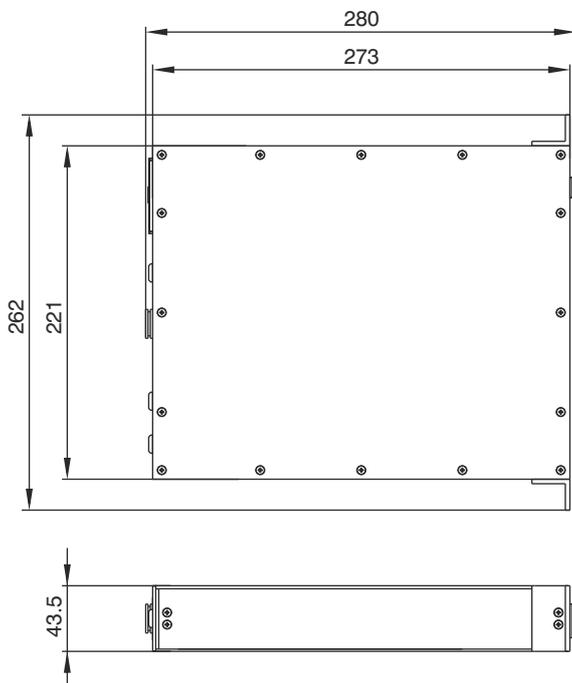
ANSCHLÜSSE // <i>CONNECTORS</i>	
Remote / Tally OUT	6-pol. LEMO
DC IN	3-pol. LEMO
Prog.	4-pol. LEMO
Antenna	SMA

Telemetry Rack

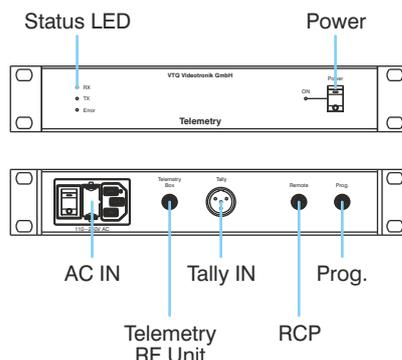


- + Protokolle // *Protocols*:
SONY, HITACHI, IKEGAMI, THOMSON (GV)
- + für Einsatz in Kamerastudio, Drohnen, Seilkamera etc. // *for operation in camera studios, with drones, rope cameras eg.*

Abmessungen // *Dimensions*



Anschlüsse // *Connectors*



Technische Daten // *Technical details*

HF	
Frequenzbereiche // <i>Frequency ranges</i>	868/869MHz 446-460MHz
Sendeleistung // <i>Transmission power</i>	25mW 500mW
Modulation // <i>Modulation</i>	FSK, ASK, GFSK, MSK
Adressen // <i>Address</i>	255
Datenrate // <i>Transmission rate</i>	1.2-200kBaud
Empfindlichkeit // <i>Sensitivity</i>	-112dBm - -86dBm (abhängig von Baudrate und Konfiguration // <i>depends on baud rate and modulation</i>)
Protokolle // <i>Protocols</i>	SONY, HITACHI, IKEGAMI, THOMSON

PHYSIKALISCHE EIGENSCHAFTEN // <i>PHYSICAL CHARACTERISTIC</i>	
Spannungsversorgung // <i>Power supply</i>	230V AC
Leistungsaufnahme // <i>Power consumption</i>	13W
Temperaturbereiche // <i>Temperature ranges</i> (andere auf Anfrage // <i>others on request</i>)	-35°C - +65°C / -35°C - +65°C
Betrieb/Lagerung // <i>Operation/Storage</i>	-35°C - +65°C / -35°C - +65°C
Abmessungen // <i>Dimensions</i>	262 x 252.4 x 43.5mm
Gewicht // <i>Weight</i>	2000g

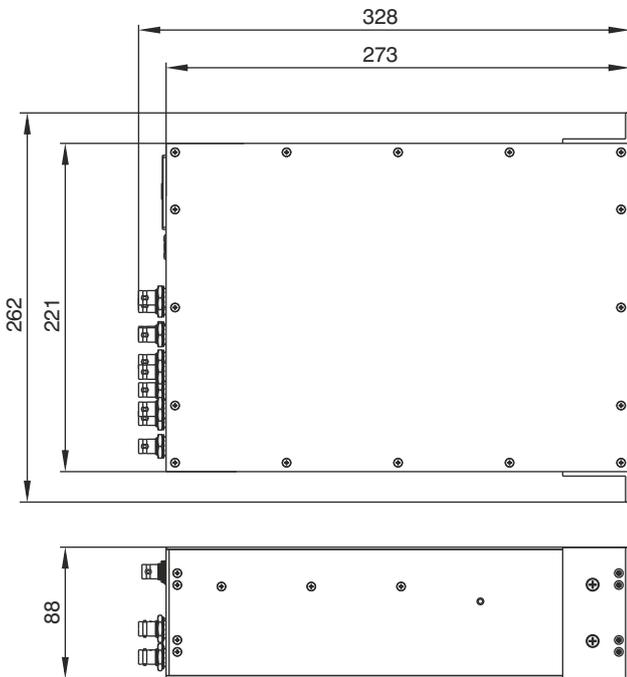
ANSCHLÜSSE // <i>CONNECTORS</i>	
RCP	6-pol. LEMO
Prog.	4-pol. LEMO
Tally IN	3-pol. LEMO
Telemetry Box (RS485)	5-pol. LEMO
230V AC IN	



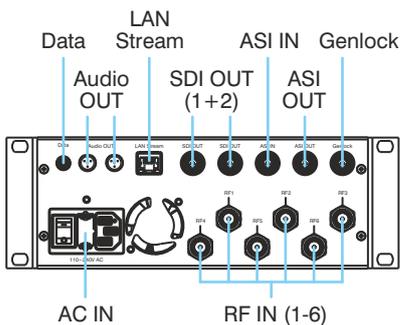
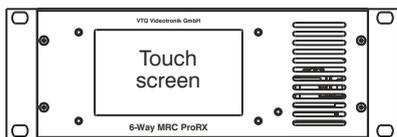
6-Way MRC ProRX

- + ASI Diversity & ASI Multidiversity possible
- + Network Roaming possible
- + 6-Way MRC Diversity
- + ASI OUT
- + 2x SDI OUT
- + ASI IN
- + Touchscreen
- + RS232 OUT
- + UDP / RTP unicast / multicast streaming

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

HF VIDEO	
Frequenzbereiche // Frequency ranges	167 - 900MHz
Diversity-Typ // Diversity type	6-Way MRC Diversity (FFT-MRC)
Modulation // Modulation	COFDM (QPSK, 16QAM, 64QAM)
Bandbreite // Band width	6, 7, 8MHz
Verzögerung // Delay	22ms depend on mode
Kompression // Compression	H.264 (embedded audio)
Videoformate // Video format	1080i50/59,94/60 1080p23,98/24/25/29,97/30, 1080psf23,98/24/25/29,97/30 720p23,98/24/25/29,97/30/50/59,94/60, 576i50, 480i59,94/60
RS232	embedded
Entschlüsselung // Decryption	AES / 3DES

PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // Power supply	110-230V AC
Leistungsaufnahme // Power consumption	30W
Temperaturbereiche // Temperature ranges (andere auf Anfrage // others on request)	-35°C - +65°C / -35°C - +65°C
Betrieb/Lagerung // Operation/Storage	-35°C - +65°C / -35°C - +65°C
Abmessungen // Dimensions	262 x 328 x 88mm
Gewicht // Weight	t.b.d.

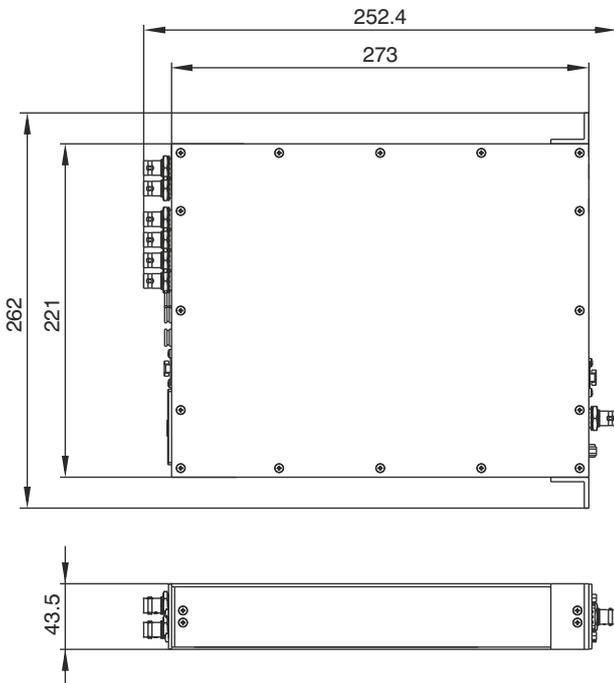
ANSCHLÜSSE // CONNECTORS	
SDI OUT (2x)	BNC
ASI IN	BNC
ASI OUT	BNC
Data	6-pol. LEMO
Audio OUT 1+2	3-pol. Mini XLR
Genlock	BNC
LAN Stream	RJ45
RF IN (6x)	BNC
110-240V AC	



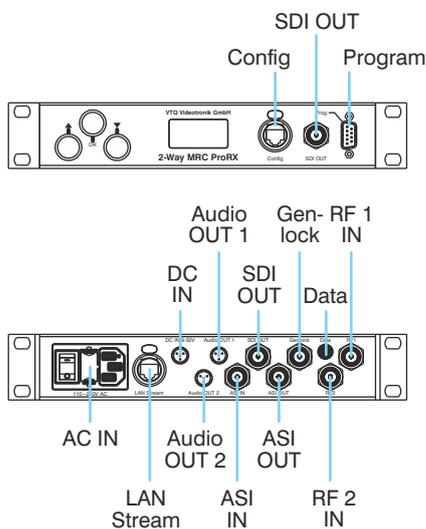
2-Way MRC ProRX

- + The 2-way MRC Receiver is, due to its compact half-19" form factor, an excellent manufacturing quality and an outstanding RF sensitivity, our top-selling professional receiver.
- + Combined with a theoretically infinite number of Pro RX ASI Receiver (using our *IRD* (INFINIT Realtime Diversity) technology), the reception range is extendable with utmost freedom and flexibility for the user.

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

HF VIDEO	
Frequenzbereiche // Frequency ranges	167MHz-900MHz
Diversity-Typ // Diversity type	2-Way MRC Diversity (FFT-MRC)
Modulation // Modulation	COFDM (QPSK, 16QAM, 64QAM)
Bandbreite // Band width	4, 5, 6, 7, 8MHz (1.25, 2.5MHz optional)
Verzögerung // Delay	22ms depend on mode
Kompression // Compression	H.264 (embedded audio)
Videoformate // Video format	1080i50/59,94/60 1080p23,98/24/25/29,97/30, 1080psf23,98/24/25/29,97/30 720p23,98/24/25/29,97/30/50/59,94/60, 576i50, 480i59,94/60
RS232	embedded
Entschlüsselung // Decryption	AES / 3DES

PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // Power supply	110-230V AC / 9-30V DC
Leistungsaufnahme // Power consumption	13W(without Down Converters)
Temperaturbereiche // Temperature ranges	-10°C - +50°C
Abmessungen // Dimensions	262 x 252.4 x 43.5mm
Gewicht // Weight	2000g

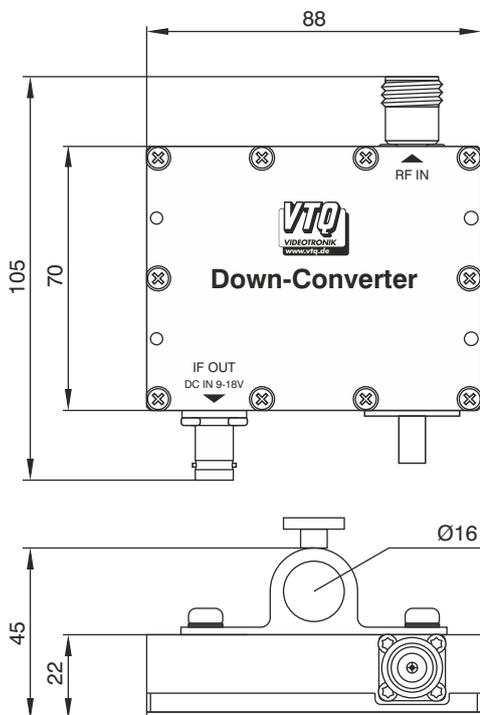
ANSCHLÜSSE // CONNECTORS	
SDI IN (2x)	BNC
ASI IN	BNC
ASI OUT	BNC
Config.	RJ45
Prog. (Remote)	9-pol. Sub-D
Data (RS232)	6-pol. LEMO
Audio OUT 1+2	3-pol. Mini XLR
Genlock	BNC
LAN Stream	RJ45
RF IN (2x)	BNC
DC IN 9-30V	4-pol. Mini XLR
110-240V AC	



Down-Converter

- + Eingangsfrequenzen von 1000 bis 6000MHz
Input frequencies from 1000 to 6000MHz
- + hohe Bandbreite // *high band width*
- + niedriges Phasenrauschen // *low phase noise*
- + hohe Frequenzstabilität // *high frequency stability*
- + DC-Versorgung über die Ausgangsbuchse // *remote power supply via output connector*
- + 16mm Stativaufnahme // *16mm spigot mount*

Abmessungen // Dimensions



Technische Daten // Technical details

HF

Frequenzbereiche (RF) // Frequency ranges (RF)	
1000-1500MHz	
1500-2000MHz	
2000-2700MHz	
3000-3700MHz	
4400-4800MHz	
4800-5500MHz	
5500-6000MHz	

PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC

Spannungsversorgung // Power supply	9-18V DC
Spannungsaufnahme // Power consumption	max. 300 mA
Temperaturbereiche // Temperature ranges	
Betrieb/Lagerung // Operation/Storage	+55°C
Abmessungen // Dimensions	88 x 70 x 22mm
Gewicht // Weight	typ. 240 g

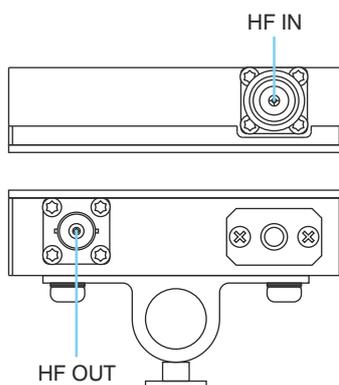
ANSCHLÜSSE // CONNECTORS

Eingang / Impedanz // Input connector / impedance	N-female, 50 ohms
Ausgang / Impedanz // Output connector / impedance	BNC-female, 50 ohms

MONTAGE // MOUNT

Stativaufnahme // Spigot mount	16mm
Gewinde // Thread	1/4" (20UNC)

Anschlüsse // Connectors





WA VT-TX

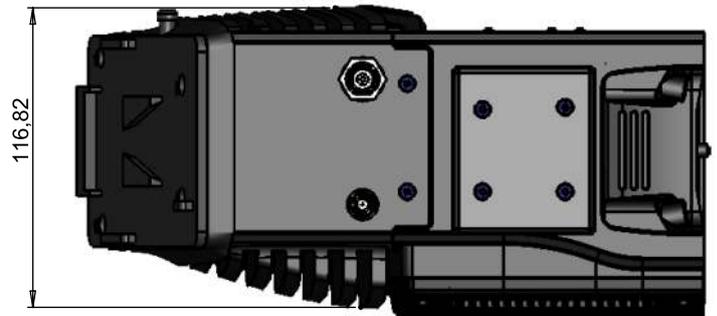
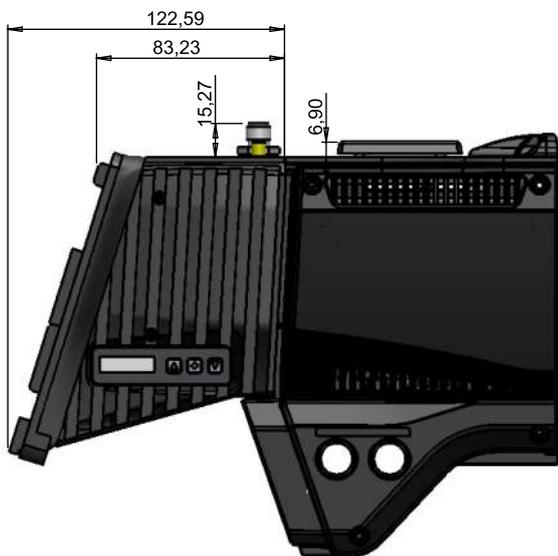
- + **VTQ Wireless-Camera-Adapter**
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- + Plus, a bidirectional, digital FSK-Radiolink is integrated which transmits all camera head and remote control data both ways.
- + In cooperation with Hitachi.

Technische Daten // Technical details

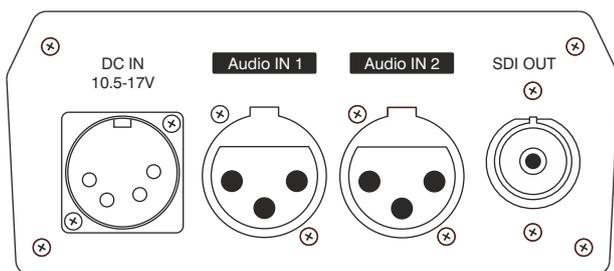
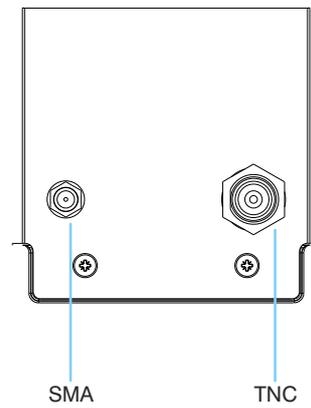
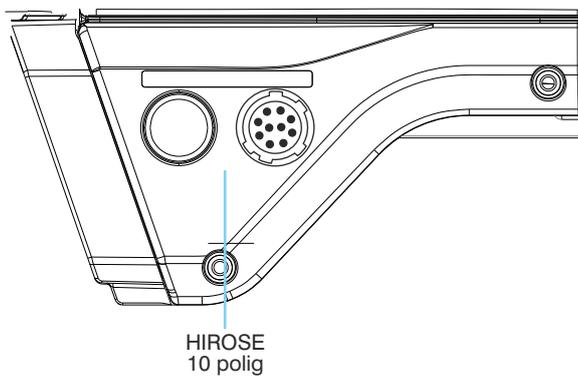
COFDM Video Transmitter	
Frequenzbereich // Frequency range	2.200 - 2.600MHz other on request
Sendeleistung // Transmission power	2.4GHz: 10/25/100/250/500mW (HF)
Tuning step size	0.5MHz
Modulation // Modulation	COFDM (QPSK, 16QAM) optional: COFDM (64QAM)
Punktierung // Code rate	1/2, 2/3, 3/4, 5/6, 7/8
Guardintervall // Guard interval	1/32, 1/16, 1/8, 1/4
Symbollänge // Carriers	2k, 8k
Bandbreite // Bandwidth	6, 7, 8MHz
Methode // Method	H.264
Verzögerung // Delay	22-80ms (depend on mode)
Videonorm // Video standard	PAL / NTSC
Videoeingang // Video input	Camera input
HD-Format // HD format	1080i50, 1080i60 1080p23,98, 180p24, 1080p25 1080p29,97, 1080p24, 1080p25 1080p29,97, 1080p30, 1080i59,94 720p23,98, 720p24, 720p25, 720p29,97 720p30, 720p50,720p59,94, 720p60
SD-Format // SD format	576i50 (PAL), 480i59,94 (NTSC), 480i60 (NTSC)
Audio // Audio	Embedded Audio (via SDI) analogue / symmetric / line
Verschlüsselung // Encryption	AES (256Bit)
Telemetry Control	
Frequenzbereich // Frequency range	455 -469MHz other on request
Sendeleistung // Transmission power	10, 25, 100, 500mW (HF)
Adressen // Address	255
Kanäle // Channels	abhängig von Modulation und Datenrate depends on modulation and data rate
Datenrate // Transmission rate	2.2kBaud - 200kBaud
Modulation / Modulation	FSK // ASK // GFSK // MSK
Empfindlichkeit // Sensitivity	-112dBm - -86dBm abhängig von Baudrate und Konfiguration depends on baud rate and modulation

Power	
Spannungsversorgung // Power supply	via 4-pole XLR or V/G-Mount
Leistungsaufnahme // Power consumption	~28W
Environmental	
Temperatur Betrieb // Operating temperature	-5°C - +40°C
Temperatur Lagerung // Storage temperature	-10°C - +50°C
Physical Characteristics	
Abmessungen // Dimensions	t.b.d
Gewicht // Weight	2460g
Connectors	
Video IN	via camera connector
SDI OUT (HD/SD, Embedded Audio)	BNC
DC IN	via 4-pole XLR or V/G-Mount
Antenna Video	TNC
Antenna Telemetry	SMA
audio symmetrisch	3-pol XLR
Config Telemetry	High Rose

Abmessungen // Dimensions



Anschlüsse // Connectors

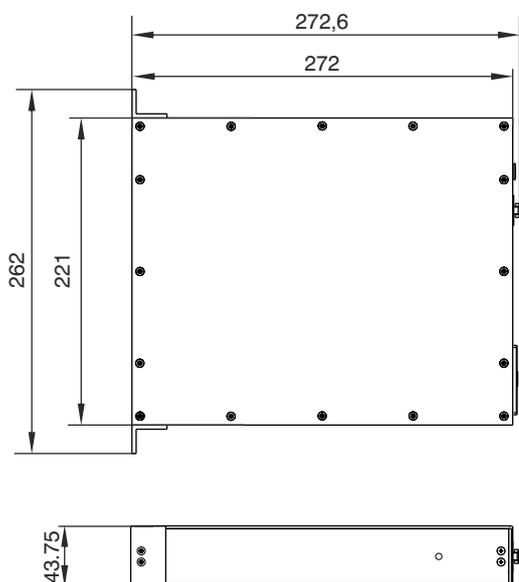


WA VT-RX

+ The telemetry unit represents a base-rack-unit, which translates both the control data of the RCP and the camera head data into the corresponding protocols.



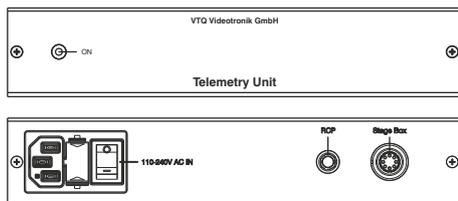
Abmessungen // Dimensions



Technische Daten // Technical details

Physicals Characteristics	
Abmessung // Dimension	272 x 262 x 43,75mm.
Gewicht // Weight	1100g
Connectors	
RCP - Hitachi	4-pole HIROSE
Stage Box	6-pole HIROSE
AC IN 110-240V	Kaltegerätestecker / Rubber connector

Anschlüsse // Connectors

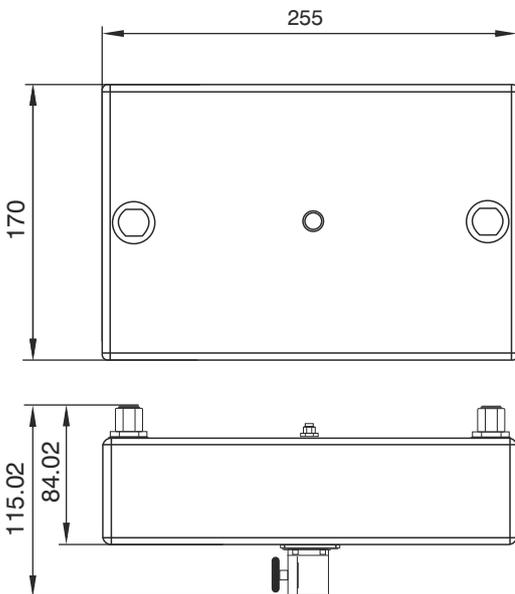




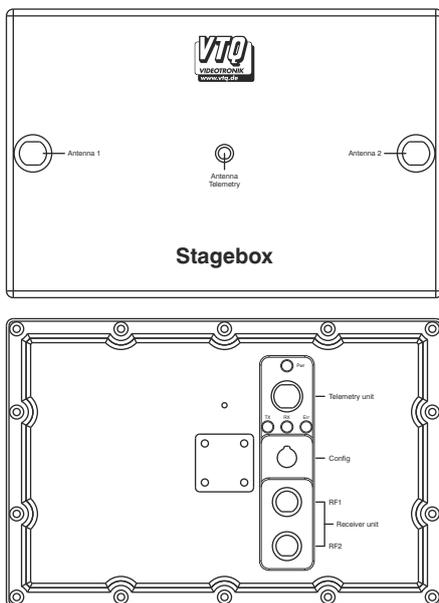
WA VT-SB

- + A completely integrated solution which comprises both the receiver's converters and the RF-unit of the telemetry system. This lightweight, mobile solution is quickly and easily set up at every imaginable location in the vicinity of your mobile camera.
- + You can effortlessly offset the stage box in a up to 150 Meter distance from your base unit located in a rack or an OB van.
- + The 16mm spigot intake of the stage box offers a simple setup on every stand or Magic Arm.

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

Down Converter	
Frequenzbereich (RF) // Frequency range (RF)	2000 - 2700 Mhz
HF-Eingangsleistung // RF input power	0dBm (max. 1mW)
Ausgangsfrequenz (IF) // Output frequency (IF)	167- 867 Mhz
Verstärkung // Gain	typ. 30 dB
Rauschzahl // Noise figure	@ 18 °C: typ. 1.0 dB, max. 1.3 dB
LO-Frequenz // LO frequency	1833 Mhz
LO-Genauigkeit // LO accuracy	@ 18 °C: +/- 2 ppm
LO-Frequenzstabilität // LO frequency stability	(0-40 °C) +/- 3 ppm
Phasenrauschen // Phase noise	@ 1 kHz: typ. -93 dBc/Hz
	@ 10 kHz: typ. -98 dBc/Hz
	@ 100 kHz: typ. -108 dBc/Hz
Ausgang // Output Ip3	typ. +18dBm
Eingang Impedanz // Input impedance	50 ohms
Ausgang Impedanz // Output impedance	50 ohms

HF Telemetry	
Frequenzbereich // Frequency range	452 - 464 MHz
Sendeleistung // Transmission power	10, 25, 100, 500 mW
Kanäle // Channels	abhängig von Modulation und Datenrate <i>depends on modulation and data rate</i>
Datenrate // Transmission rate	1.2kBaud - 200kBaud
Modulation // Modulation	FSK // ASK // GFSK // MSK
Empfindlichkeit // Sensitivity	-112dBm - -86dBm
	abhängig von Baudrate und Konfiguration <i>depends on baud rate and modulation</i>

Power	
Stromversorgung // Power supply	via telemetry ½ 19"
Stromaufnahme // Current consumption	t.b.d.

Environmental	
Temperatur Betrieb // Operating temperature	-10°C - +55°C
Temperatur Lagerung // Storage temperature	-20°C - +60°C
IP Schutzgrad // IP protection class	IP 64

Physical characteristics	
Abmessungen // Dimensions	255 x 170 x 65mm
Gewicht // Weight	2.700g

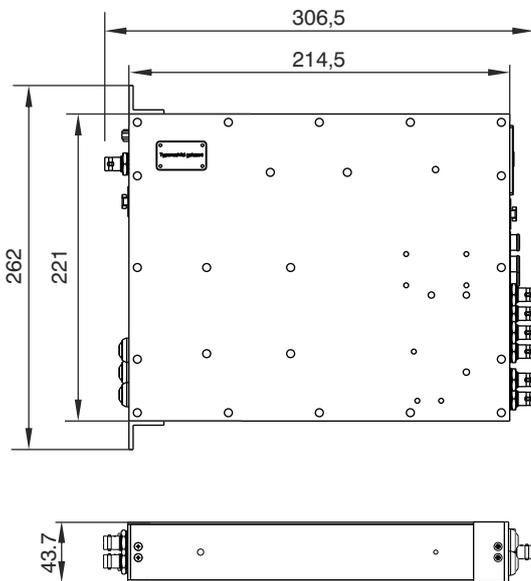
Connectors	
RF IN 1+2	N-Buchse / N female
RF OUT 1+2	BNC, 50 Ohm
RF Telemetry	SMA
Telemetry (½19")	6-pole HIROSE

WA VT Pro RX

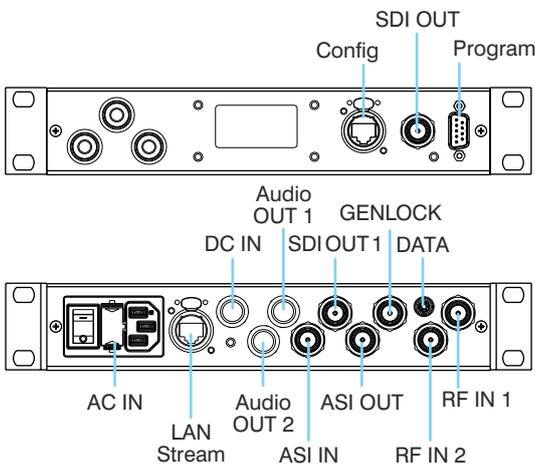


- + **IRD - INFINIT Realtime Diversity**
- + **Network Roaming possible**
- + 2-Way MRC Diversity
- + HD SDI OUT
- + ASI OUT
- + ASI IN
- + RS232 embedded OUT
- + Konfiguration über Netzwerk // Network setup
- + UDP / RTP unicast / multicast streaming

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

HF VIDEO	
Frequenzbereiche // Frequency ranges	167 - 867MHz
Diversity-Typ // Diversity type	2-Way MRC Diversity (FFT-MRC)
Modulation // Modulation	COFDM (QPSK, 16QAM), (64QAM optional)
Bandbreite // Band width	6, 7, 8MHz
Videoformate // Video format	1080i50/59,94/60 1080p23,98/24/25/29,97/30, 1080psf23,98/24/25/29,97/30 720p23,98/24/25/29,97/30/50/59,94/60, 576i50, 480i59,94/60
RS232	embedded
Entschlüsselung // Decryption	AES / 3DES
PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // Power supply	110 - 240V DC
Leistungsaufnahme // Power consumption	16.5W
Temperaturbereiche // Temperature ranges (andere auf Anfrage // others on request)	
Betrieb/Lagerung // Operation/Storage	-10°C - +50°C / -10°C - +50°C
Abmessungen // Dimensions	306.5 x 262 x 43.7mm
Gewicht // Weight	2500 g
ANSCHLÜSSE // CONNECTORS	
SDI OUT	BNC
ASI IN	BNC
ASI OUT	BNC
RF IN	2xBNC
LAN Stream	RJ45
Config.	RJ45
DATA (RS232 emb. RS485 Remote)	6-pol. LEMO
Programm	9-pol. Sub-D
Audio OUT	mini XLR
DC IN	mini XRL
Genlock	BNC
AC IN	Kältegerätestecker

Frequenzbereiche von 900 - 6GHz via Downconverter möglich



ARRI Amira Wireless Solution

- + A sophisticated video and data link has the ARRI Amira completely prepared for every broadcast environment.
- + This enhancement does not only support the robust wireless transmission of the brilliant picture quality the AMIRA provides, but the entire remote control features of the camera as well.
- + In cooperation with ARRI.

Technische Daten // Technical details

COFDM Video Transmitter

Frequenzbereich // Frequency range	2.000 - 2.700MHz other on request
Sendeleistung // Transmission power	2.4GHz: 10/25/100/200mW
Tuning step size	0.5MHz
Modulation // Modulation	COFDM (QPSK, 16QAM) optional: COFDM (64QAM)
Punktierung // Code rate	1/2, 2/3, 3/4, 5/6, 7/8
Guardintervall // Guard interval	1/32, 1/16, 1/8, 1/4
Symbollänge // Carriers	2k, 8k
Bandbreite // Bandwidth	6, 7, 8MHz
Methode // Method	H.264
Verzögerung // Delay	22-80ms (depend on mode)
Videonorm // Video standard	PAL / NTSC
Videoeingang // Video input	Camera input
HD-Format // HD format	1080i50, 1080i60 1080p23,98, 1080p24, 1080p25 1080p29,97, 1080p24, 1080p25 1080p29,97, 1080p30, 1080i59,94 720p23,98, 720p24, 720p25, 720p29,97 720p30, 720p50,720p59,94, 720p60
SD-Format // SD format	576i50 (PAL), 480i59,94 (NTSC), 480i60 (NTSC)
Audio // Audio	Embedded Audio (via SDI) analogue / symmetric / line
Verschlüsselung // Encryption	AES (256Bit)

Telemetry Control

Frequenzbereich // Frequency range	455 -469MHz other on request
Adressen // Address	255
Kanäle // Channels	abhängig von Modulation und Datenrate depends on modulation and data rate
Datenrate // Transmission rate	2.2kBaud - 200kBaud
Modulation / Modulation	FSK // ASK // GFSK // MSK
Empfindlichkeit // Sensitivity	-112dBm - -86dBm abhängig von Baudrate und Konfiguration depends on baud rate and modulation

Power

Spannungsversorgung // Power supply	V/G-Mount or Camera
Leistungsaufnahme // Power consumption	~28W

Environmental

Temperatur Betrieb // Operating temperature	-5°C - +40°C
Temperatur Lagerung // Storage temperature	-10°C - +50°C

Physical Characteristics

Abmessungen // Dimensions	t.b.d
Gewicht // Weight	1020g

Connectors

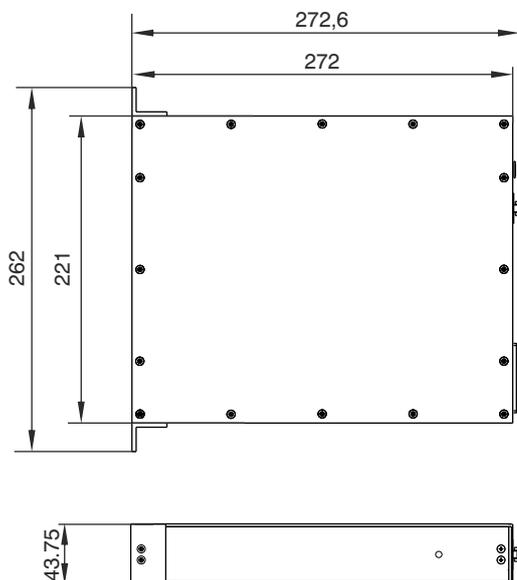
SDI IN	BNC
SDI OUT (HD/SD, Embedded Audio)	BNC
DC IN	via 4-pole XLR or V/G-Mount
Antenna Video	TNC
Antenna Telemetry	SMA
Telemetry Data	RJ45
Telemetry Setup	mini USB

Amira VT-TV

- + The telemetry unit represents a base-rack-unit, which translates both the control data of the RCP and the camera head data into the corresponding protocols.



Abmessungen // Dimensions



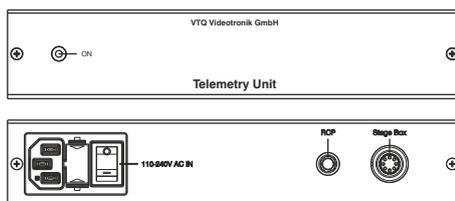
Technische Daten // Technical details

Physicals Characteristics

Abmessung // Dimension	272 x 262 x 43,75mm.
Gewicht // Weight	1100g

Stage Box	6-pole HIROSE
AC IN 110-240V	Kaltegerätestecker / Rubber connector
RCP / CNA ARRI	RJ45

Anschlüsse // Connectors

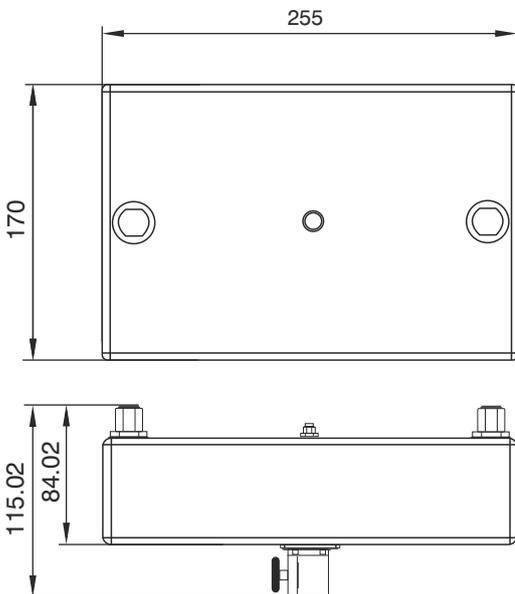




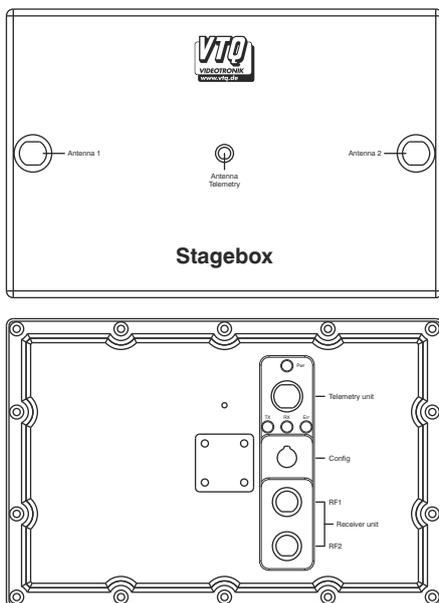
Amira VT-SB

- + A completely integrated solution which comprises both the receiver's converters and the RF-unit of the telemetry system. This lightweight, mobile solution is quickly and easily set up at every imaginable location in the vicinity of your mobile camera.
- + You can effortlessly offset the stage box in a up to 150 Meter distance from your base unit located in a rack or an OB van.
- + The 16mm spigot intake of the stage box offers a simple setup on every stand or Magic Arm.

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

Down Converter	
Frequenzbereich (RF) // Frequency range (RF)	2000 - 2700 Mhz
HF-Eingangsleistung // RF input power	0dBm (max. 1mW)
Ausgangsfrequenz (IF) // Output frequency (IF)	167- 867 Mhz
Verstärkung // Gain	typ. 30 dB
Rauschzahl // Noise figure	@ 18 °C: typ. 1.0 dB, max. 1.3 dB
LO-Frequenz // LO frequency	1833 Mhz
LO-Genauigkeit // LO accuracy	@ 18 °C: +/- 2 ppm
LO-Frequenzstabilität // LO frequency stability	(0-40 °C) +/- 3 ppm
Phasenrauschen // Phase noise	@ 1 kHz: typ. -93 dBc/Hz
	@ 10 kHz: typ. -98 dBc/Hz
	@ 100 kHz: typ. -108 dBc/Hz
Ausgang // Output Ip3	typ. +18dBm
Eingang Impedanz // Input impedance	50 ohms
Ausgang Impedanz // Output impedance	50 ohms

HF Telemetry	
Frequenzbereich // Frequency range	452 - 464 MHz
Sendeleistung // Transmission power	10, 25, 100, 500 mW
Kanäle // Channels	abhängig von Modulation und Datenrate <i>depends on modulation and data rate</i>
Datenrate // Transmission rate	1.2kBaude - 200kBaude
Modulation // Modulation	FSK // ASK // GFSK // MSK
Empfindlichkeit // Sensitivity	-112dBm - -86dBm
	abhängig von Baudrate und Konfiguration <i>depends on baud rate and modulation</i>

Power	
Stromversorgung // Power supply	via telemetry ½ 19"
Stromaufnahme // Current consumption	10W

Environmental	
Temperatur Betrieb // Operating temperature	-10°C - +55°C
Temperatur Lagerung // Storage temperature	-20°C - +60°C
Luftfeuchtigkeit // Humidity	max. 70%
	nicht kondensierend / non-condensing

Physical characteristics	
Abmessungen // Dimensions	255 x 170 x 65mm
Gewicht // Weight	2.700g

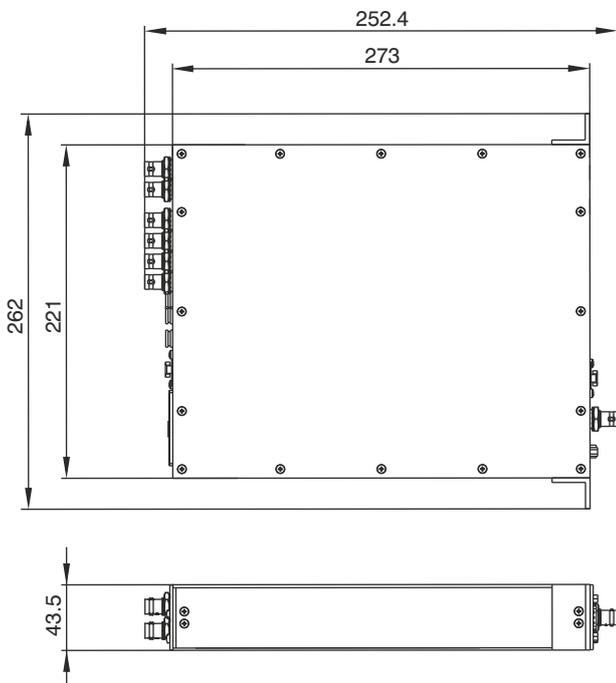
Connectors	
RF IN 1+2	N-Buchse / N female
RF OUT 1+2	BNC, 50 Ohm
RF Telemetry	SMA
Telemetry (½19")	6-pole HIROSE



ProRX ASI

- + IRD - INFINIT Realtime Diversity
- + Network Roaming possible
- + HD receiver with terrestrial Tuner
- + 2-Way MRC Diversity
- + ASI OUT
- + ASI IN
- + Konfiguration über Netzwerk // Network setup
- + UDP / RTP unicast / multicast streaming

Abmessungen // Dimensions



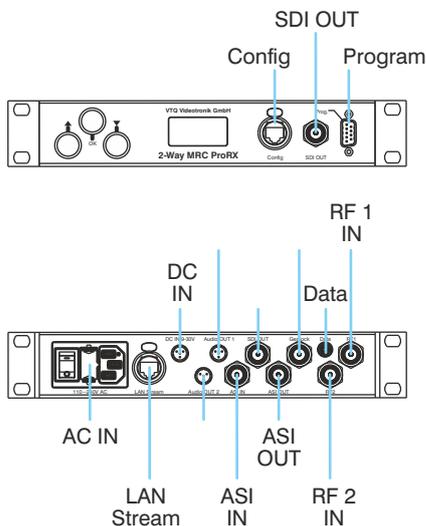
Technische Daten // Technical details

HF VIDEO	
Frequenzbereiche // Frequency ranges	167MHz-867MHz
Diversity-Typ // Diversity type	2-Way MRC Diversity (FFT-MRC)
Modulation // Modulation	COFDM (QPSK, 16QAM, 64QAM)
Bandbreite // Band width	4, 5, 6, 7, 8MHz (1.25, 2.5MHz optional)
RS 232	embedded
Entschlüsselung // Decryption	AES

PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // Power supply	110-230V AC / 9-30V DC
Leistungsaufnahme // Power consumption	13W (without Down Converters)
Temperaturbereiche // Temperature ranges	-10°C - +50°C
Abmessungen // Dimensions	262 x 252.4 x 43.5mm
Gewicht // Weight	2000g

ANSCHLÜSSE // CONNECTORS	
ASI IN	BNC
ASI OUT	BNC
Config.	RJ45
RS 232 embedded	6-pol. Lemo
Audio OUT 1+2	3-pol. Mini XLR
LAN Stream	RJ45
RF IN (2x)	BNC
DC IN 9-30V	4-pol. Mini XLR
110-240V AC	

Anschlüsse // Connectors

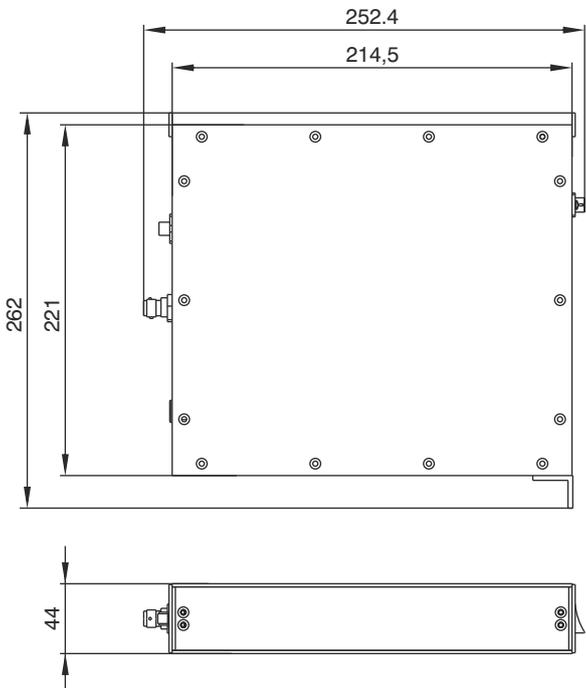




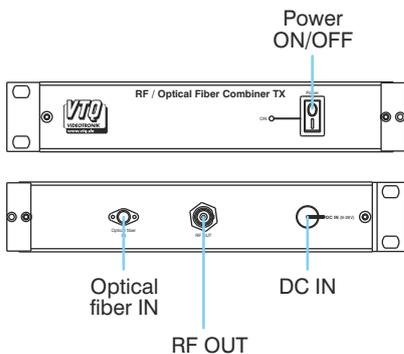
RF to Fiber

- + zum Absetzen der Antennen von Empfänger über größere Distanzen über Glasfaser // *to offset antennas from receiver over larger distances via optical fiber*
- + bis zu 20km (abhängig vom HF-Level) *up to 20km (depend on RF level)*

Abmessungen // Dimensions



Anschlüsse // Connectors



Technische Daten // Technical details

RF TX-RX Link	
Frequency range	100-2400MHz
RF Gain	>0dB
Gain Flatness	≤ ±2dB
1dB Input compression point	≥ -5dBm
VSWR	≤ 2:1
RF input signal range	-65dBm - -5dBm
Maximum input level	10dBm
Noise Figure	<30dB
Spurious signals	-70dBc
Input and output impedance	50ohm

OPTICAL AND ELECTRICAL (TX,RX)	
Laser diode operating wavelength	1.31μm
Receiver Photodiode operating wavelength	1.2-1.65μm
Optical Power	2 ±0.5mW
Optical Connectors	FC/APC
RF input and output connectors	SMA
Electrical connectors	DB9

PHYSIKALISCHE EIGENSCHAFTEN // PHYSICAL CHARACTERISTIC	
Spannungsversorgung // Power supply	9 - 40V DC
Spannungsaufnahme // Power consumption	t.b.d.
Temperaturbereiche // Temperature ranges	
Betrieb/Lagerung // Operation/Storage	-10°C - +65°C / -40°C - +85°C
Abmessungen // Dimensions	262 x 252.4 x 43.5mm
Gewicht // Weight	1500g

ANSCHLÜSSE // CONNECTORS	
RF IN (Video)	SMA
RF OUT (Telemetry)	TNC
Optical fiber IN (Telemetry)	t.b.d.
Optical fiber OUT (Video)	t.b.d.
Antenna (Telemetry)	TNC
DC IN	3-pol. LEMO



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