

VTQ Videotronik GmbH

Electronic Manufacturing Services | Wireless Systems



With more than **50 years** of company history VTQ Videotronik GmbH has a high degree of expert knowledge. After emerging from the radio and TV industry we are nowadays a medium-sized company with 175 employees.

We are developer and producer of professional video, audio and data transmission.

Our brand products are known worldwide and our devices are effectively installed by customers in numerous countries for many years.



■ **Modulations**

COFDM (DVB-T), FM, PSK, FSK

■ **Transmission power**

100mW up to 10W

■ **Frequency ranges**

300MHz up to 6GHz

■ **Band width**

1,25MHz up to 8MHz

■ **Compression**

H.264 ENC/DEC, MPEG2

H.265 (HEVC) Q1-2018

■ **Latency (Enc/Dec)**

Extreme low 5ms

Low 22ms

High Profile Encoding 60ms

■ **Data rate: COFDM**

250kbit/s bis 36mbit/s

■ **IP over COFDM**

ETH /IP full duplex UDP/ RTP/TCP-IP

■ **Interfaces**

Video: HDMI, HD-SDI, SDI, CVBS, IP

Data embedded: RS232/422/485, UART



■ VTQ Technologies

IRD - Infinite Realtime Diversity
Realtime Network Roaming
RNR - Realtime Network Roaming

■ Encryption

AES, 3DES

■ Transport stream

ASI Multiplexing

■ Types of Diversity

2-Way MRC, 6-Way MRC
(Maximum Ratio Combining)

■ Antennas

Rundstrahlantennen, Richtantennen

■ further technologies

Down Conversion
Pre-Distortion
RF to Fiber



■ Industry

Monitoring of machinery and equipment, cranes, ports and ships

■ Military

Bomb disposal (suits, vehicles, robots)

■ Authorities / Police

Monitoring systems for fire brigades, police and special forces

■ Film & Broadcast

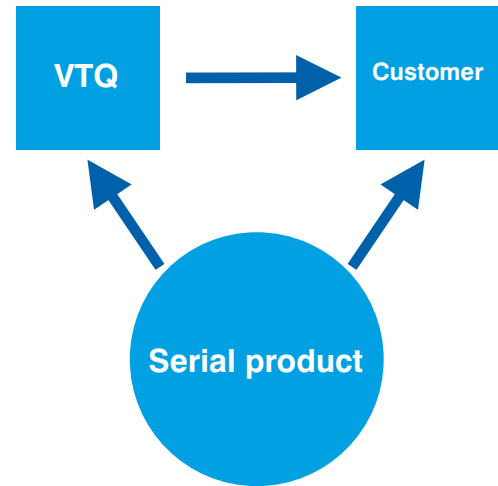
Live transmission system, video assistance systems

■ Unmanned vehicles

for civil, military, film and TV

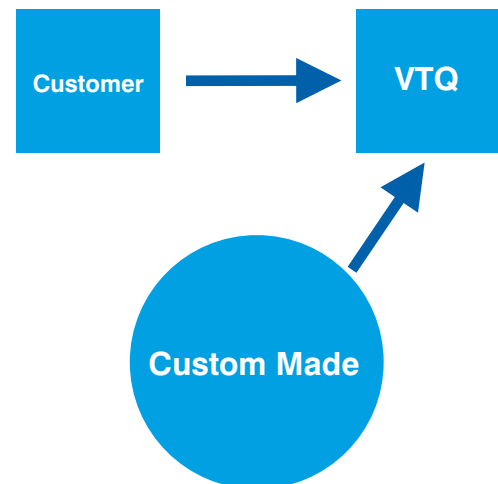
Production of wireless solutions

- + from individual to serial production
- + based on our wireless modules or complete devices
- + long-term experience in HF development and production
- + custom-made products with customer logo (rebranding)
- + custom made housings
- + no traceability of the manufacturer



Custom Made

- + made-to-measure system solutions according to the customers request
- + individual or small batch production
- + from idea to product
- + individualized wireless solutions
- + matching the special requests of each customer



Training and mission control system for marksmen

Functionality

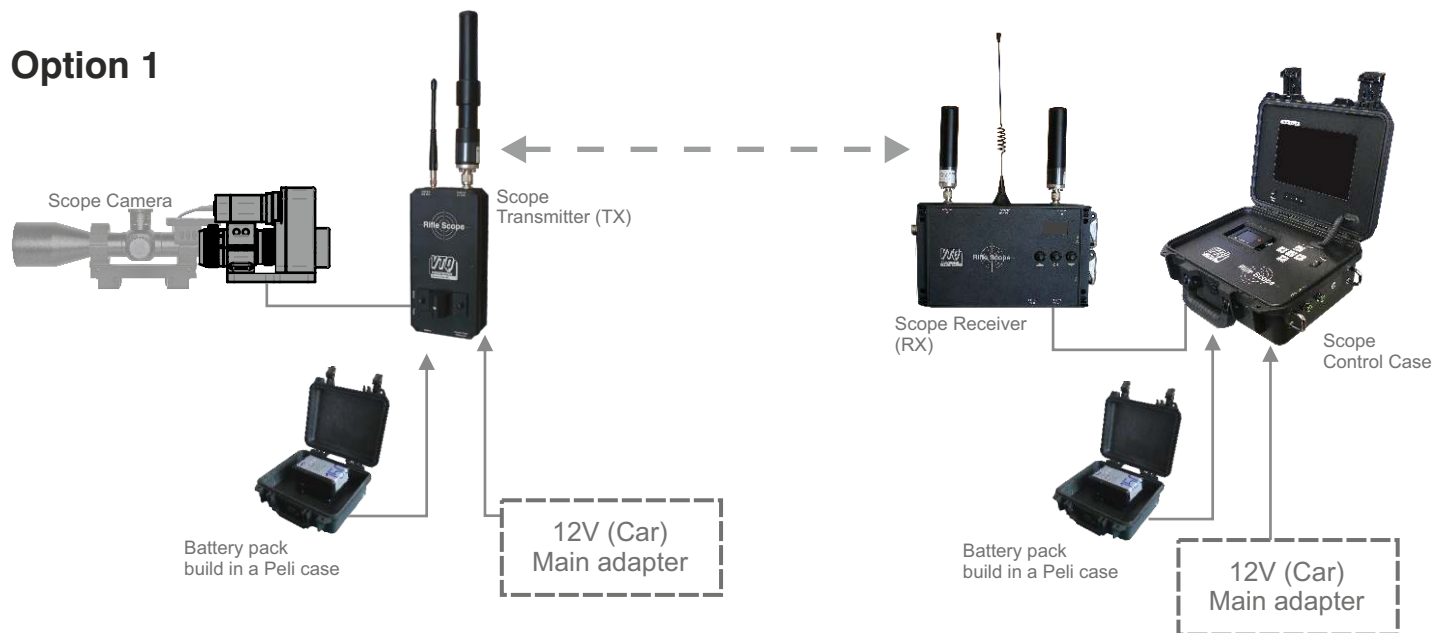
- + wireless training and mission control system for marksmen
- + for mobile application all components are incorporated in robust cases
- + improved coordination of all marksmen by the teamleader
(up to four marksmen teams)
- + visual definition of each teams targets by the teamleader
- + bidirectional audio communication between all units
- + recording of all video signals for subsequent evaluation
- + operation even under extreme temperature conditions

Components (selection)

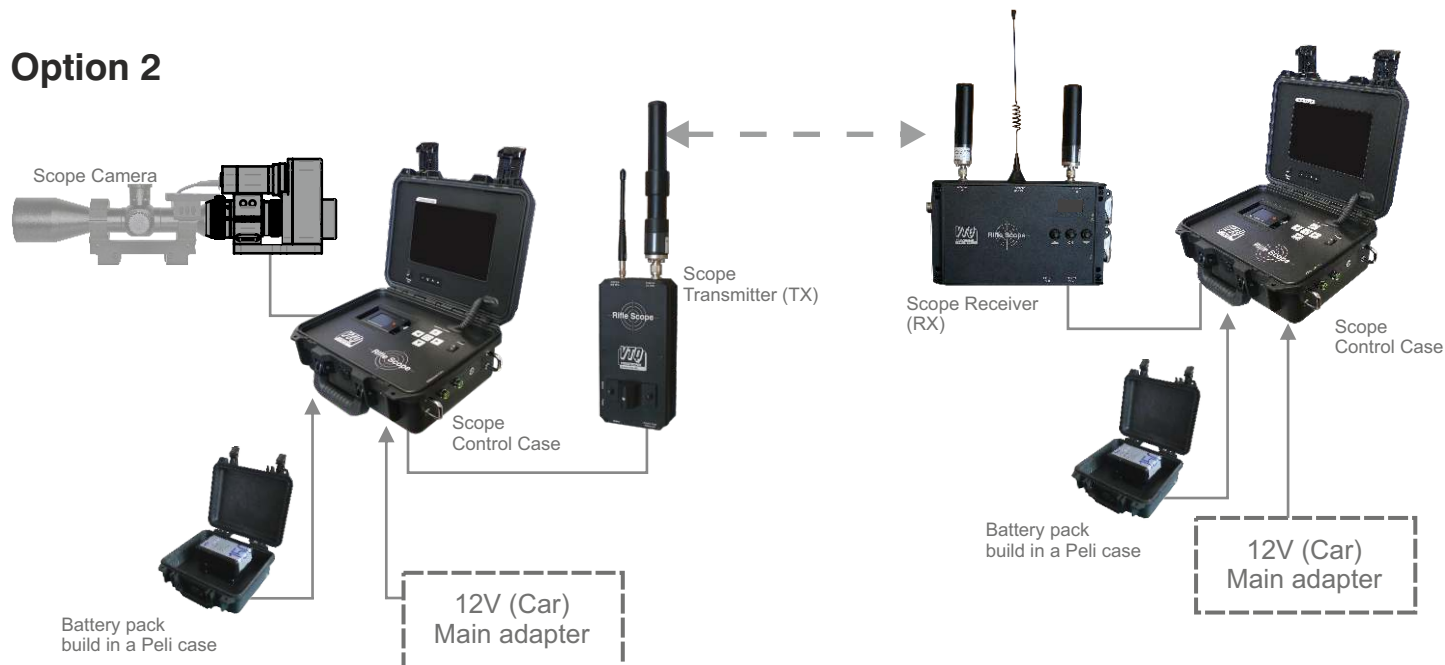
- + riflescope camera
- + dual video transmitter for the simultaneous transmission
of two video signals
- + quadprocessor or for the display of full frames or splitscreen
- + battery case for the independent power supply of all systems
- + digital video recorder for the capturing of all video sources
- + wireless control of all PTZ cameras



Option 1



Option 2



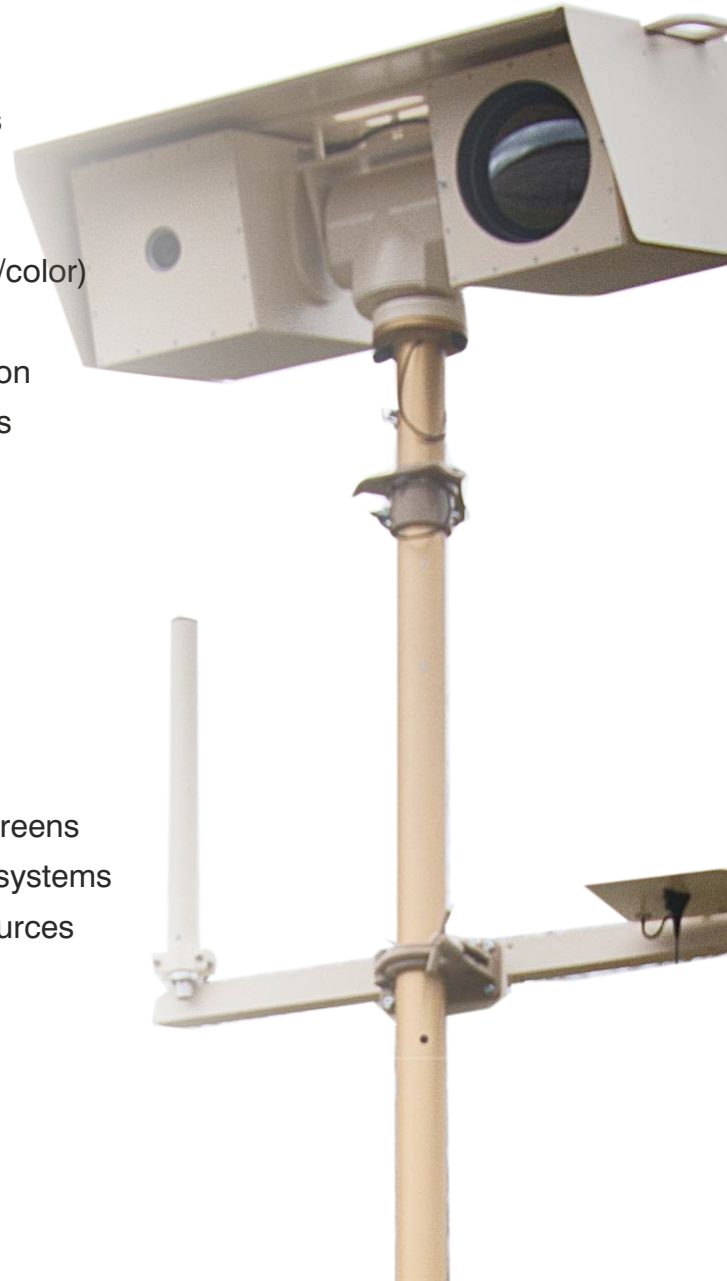
Tactical - Mobile Operations System

Functionality

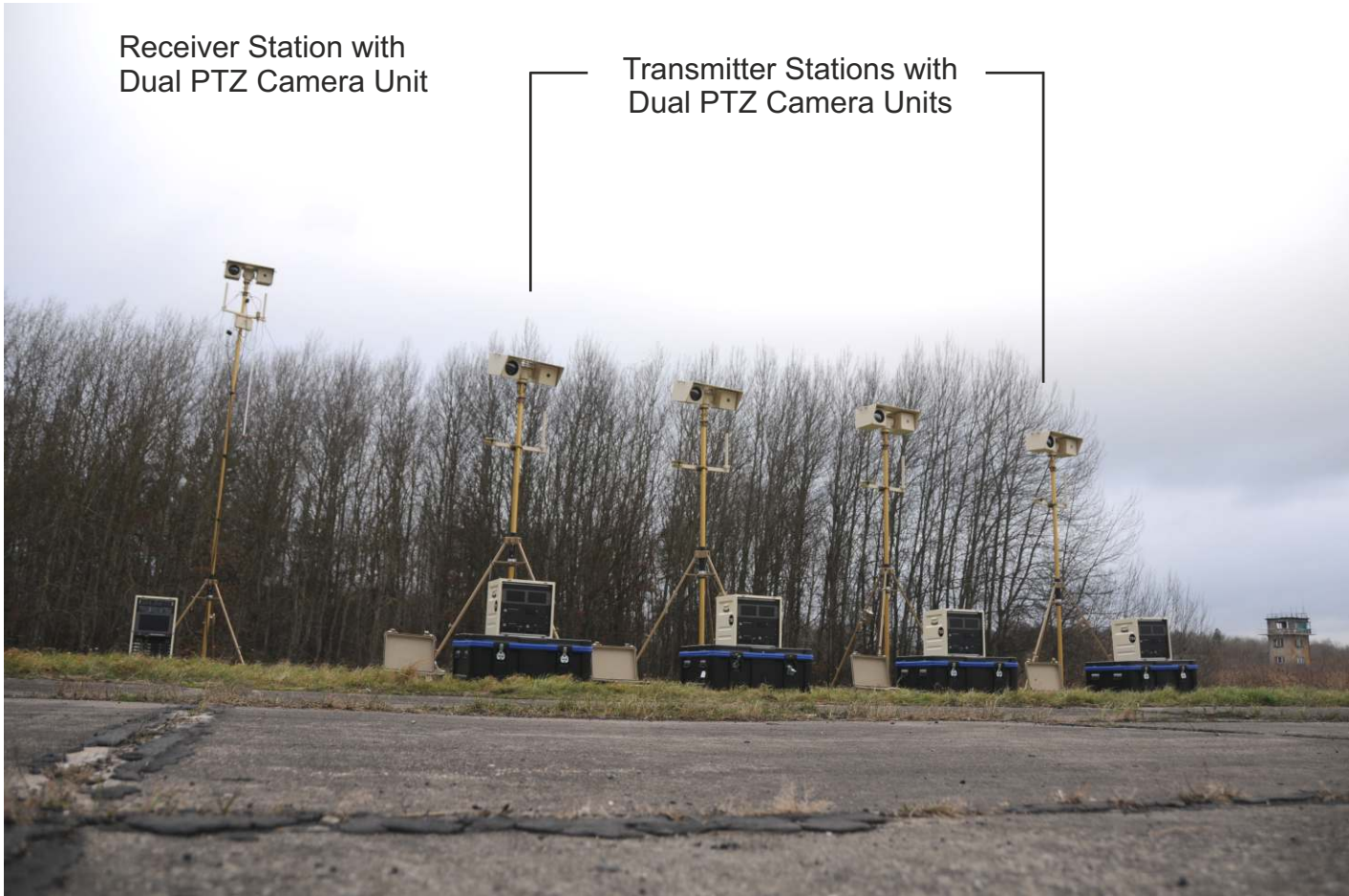
- + surveillance system for the observation of large areas
- + for mobile operation all components are installed in solid racks
- + powerful Pan-Tilt cameras with two cameras (thermal/color)
- + transmission of all signals either wireless or via fibre
- + recording of all video signals for subsequent evaluation
- + operation even under extreme temperature conditions

Components (selection)

- + Dual-PTZ with thermal and day/night camera
- + quadprocessor for the display of full frames or splitscreens
- + battery case for the independent power supply of all systems
- + digital video recorder for the capturing of all video sources
- + wireless control of all PTZ cameras



Customer Application



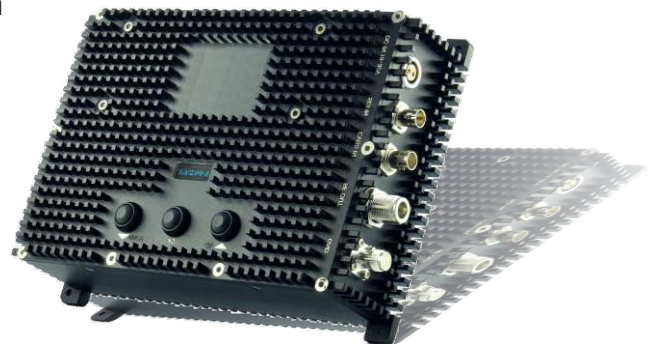
Video transmission system for drones (civil use)

- + video transmission from a drone to a base station
- + for precise control of the drone during the flight
- + video transmission in real-time (Delay only 5-9 ms)
- + small and lightweight video transmitter
- + base station with receiver inside a rugged PELI case



Video transmitter for drones (military use)

- + video transmission from a drone
- + for precise control of the drone (during the approach for a landing)
- + video transmission in real-time (Delay only 5-9 ms)
- + tested according to MIL-standards



Video transmitter for mine-sweeping vehicle

- + transmission of the video signal of a remote-controlled minesweeper vehicle
- + with wirelessly controlled Pan-Tilt-camera
- + for the observation of the vehicles front area during the minesweeping
- + extremely robust housing
- + tested according to MIL-standards



Transmitter Rack

- + Rack is IP 65 from military suppliers ZARGES
- + Extra anti shock mounted 19" frame
- + High Resolution HD Preview Monitors
- + Individual components for rapid assembly devices support
- + High mobile at all conceivable places built up
- + Peltier elements cooling for extreme temperatures



VTQ Videotronik GmbH

Gruene Strasse 2 | 06268 Querfurt

Phone: +49 34771 510 | Fax: +49 34771 22044

www.vtq.de | main@vtq.de

Contact person, sales department

Marco Hätzoldt

Phone: +49 34771 5131

E-Mail: m.haetzoldt@vtq.de

Robert Stöhr

Phone: +49 34771 5183

E-Mail: r.stoehr@vtq.de

Contact person, product management

Sebastian Heller

Phone: +49 34771 5184

E-Mail: s.heller@vtq.de



VTQ Videotronik GmbH

Gruene Strasse 2 · 06268 Querfurt
Phone +49 34771 510 · Fax +49 34771 22044
www.vtq.de · main@vtq.de
