## CONNEX Nano: Zero Latency Advanced Digital Wireless Video Systems

The CONNEX Nano is an advanced digital, zero-delay, wireless video system. The Nano is designed for seamless integration and is perfect for remote monitoring of industrial applications, including cranes, UGV and UAVs (as FPV drone vision).

Nano gives you a zero-latency video stream from the Nano camera to Nano receivers with HDMI output. With plug-n-play ease of use, the entire experience is similar to hooking a direct HDMI cable to your camera. Receive the feed on as many Nano receivers you need and output to monitors or FPV goggles. Power input supports 2-4 cells batteries (7V to 17V).



| | NANO CAMERA | CONNEX NANO TX | CONNEX NANO RX |
|---|---|---|---|
| **VIDEO** | | | |
| Video Inputs | **HDR:** 105° FOV w/pre-focused lens<br>**FPV:** 126° FOV w/pre-focused lens | MIPI - 720p30/720i60/720p60 | 5GHz RF |
| Video Outputs | **HDR:** MIPI - 720p30 or 720i60<br>**FPV:** MIPI - 720p60 | 5GHz RF | 720p60 via HDMI 2.0 Type A connector |
| HDR | 115dB | N/A | N/A |
| Video Latency (lens to HDMI output) | **720p60 (FPV):** 1mS<br>**720i60 (HDR):** 9mS<br>**720p30 (HDR):** 26mS | | |
| **PHYSICAL ATTRIBUTES** | | | |
| Dimensions | **HDR or FPV Camera:**<br>28mm x 20mm x 27mm<br>(1.1" x 0.8" x 1.1") | 70mm x 36.5mm x 7.2mm<br>(2.8" x 1.4" x 0.3") | 117mm x 75mm x 17mm<br>(4.6" x 3" x 0.7") |
| Weight | 13g (0.5oz) | 32g (1.12oz) | 134g (4.7oz) |
| Construction | ABS plastic | FR4 PCB | ABS plastic |
| **INTERFACES** | | | |
| Configuration Interface | OSD Menu operation via RX | OSD Menu operation via RX, Power and Network Status LEDs | OSD controls via RX buttons, Power and Network Status LEDs |
| Desktop App | N/A | CONNEX Nano Manager application for Windows | |

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|---|---|---|---|
| USB Interface Functionality | N/A | Micro USB – Connection to application; Wired pairing | |
| Camera-TX | Proprietary MIPI (14-pin Right-Angle, JST SM20B-SRSS) – HD Video input | N/A | N/A |

## NETWORK

| | NANO CAMERA | CONNEX NANO TX | CONNEX NANO RX |
|---|---|---|---|
| RF Channels | N/A | **DFS Frequencies:** 5.270 ~ 5.670 GHz<br>**Non-DFS Frequencies**: 5.190 ~ 5.230 GHz and 5.755 ~ 5.795 GHz<br>**HAM License:** 5190 ~ 5925 GHz | |
| Channel Selection | N/A | via RX | Auto, Fixed |
| RF Channel Bandwidth | N/A | **FPV:** 13MHz<br>**HDR:** 25 MHz | |
| RF power | N/A | 25mW (EU, SRD), 200mW (All other regions) | |
| Antennas | N/A | 2x 2dBi antennas (included) via MMCX connector | 5x 2dBi antennas (included) via short SMA connector |
| Range | N/A | Up to 1000 ft line of sight<br>(Range is not limited and can be extended using directional antennas) | |
| Multicast | N/A | Can connect one transmitter to multiple receivers | |
| Noise Rejection | Can coexist with Wi-Fi and 5GHz cordless phones; Can operate up to 14 sets in same location (Depending on regional setting) | | |

## POWER

| | NANO CAMERA | CONNEX NANO TX | CONNEX NANO RX |
|---|---|---|---|
| Power Input | 5V (via TX) | 7-17V, 4-Pin Edge connector | 7-17V DC Jack |
| Nominal Power Consumption | 100mW | 4.1W | 5W |
| Environmental | | **Operating temperature:** 0° to 40° C<br>**Operating humidity:** 10% to 90%<br>**Storage temperature:** -10° to 75° C | |

## GENERAL

| | NANO CAMERA | CONNEX NANO TX | CONNEX NANO RX |
|---|---|---|---|
| Mountability | 2x M2 side threaded holes | 4x edge threaded holes | 1/4"-20 threaded hole |
| Accessories | Camera MIPI Cable | Power cable | HDMI cable, USB OTG cable |

## ORDERING INFORMATION

| PART NUMBER | PART DESCRIPTION |
|---|---|
| AMN7100_NANO | Connex Nano TX Kit |
| AMN7200_NANO_01 | Connex Nano RX Kit, US Region |
| AMN7400_NANO | Connex Nano 720p30 HDR Camera |
| AMN7600_NANO | Connex Nano 720p60 FPV Camera |
| AMN7000_NANO | Connex Nano Bundle |