ORDER DESCRIPTION

1. Table No 1

Delivery to the customer's premises of a brand new, unused communication system – 1 set

The system has:

A. Factory new, unused radio module defined by software in built-in version, with accessories – 5 set

I. Technical parameters

1. The minimum operating frequency range: 1.98-2.7GHz
2. Output power: 2x 100mW
3. Possibility to connect a radio amplifier: 2W, 5W
4. Maximum dimensions of the radio module: 50mm x 50mm x 20mm
5. The maximum weight of the radio module: 90g
6. Supply voltage: 8..18V
7. Power consumption up to 9.5W
8. Sensitivity of the telemetry receiver: -114dBm
9. Possible bitrate MESH MIMO 87 Mbps
10. Transmitted and received data latency possible <160 ms
11. Equipment:
    a) Ethernet cable
    b) Power cable
    c) Wiring for connecting amplifiers
12. Possibility of transmitting in two polarities (MIMO)
13. Tuning step: 125 kHz
14. Working temperature: -20 ° C to + 60 ° C with cooling
15. Maximum ambient humidity 85% non-condensing
16. Internal microSD 128GB
17. Inputs / outputs
    a) RF COFDM transceiver 1 SMP (male 50 Ω)
    b) RF COFDM transceiver 2 SMP (male 50 Ω)

c) RF telemetry transceiver SMP (male 50 Ω)
d) Video SD/HD-SDI 1 MCX (female 75Ω)
e) Video SD/HD-SDI 2 MCX (female 75Ω)
f) USB control and download 3.0 Micro-B
g) Power input
h) Power output
i) 2 x Microphone / line input
j) Audio speaker output
k) IO data control input / output (7 pins)
l) Gigabit Ethernet 10/100 Mb/s
m) RS232 interface

II. Program parameters

1. COFDM transmission coding
2. Carrier modulation: BPSK, QPSK, 16QAM, 64QAM
3. Connection topology: mesh (MESH)
4. Possibility of transmission compression: H.264
5. Support for SDRAPP-MESH software
6. Ability to make settings via the web GUI
7. Possible levels of access: user, superuser and administrator accounts
8. Support for SD card with a capacity of 128 GB
9. Possibility of transmission encryption: AES 256

B. Mesh application boundle for SOL8SDR software license – 5 license

I. Program parameters:

1. 1.25 to 20 MHz bandwidth
2. QAM64 adaptive modulation
3. MIMO transmission possible
4. The minimum number of supported network nodes: 20
5. Possibility of two-way data exchange in one channel
6. Topology architecture - self-healing and self-formatting
7. Node addressing: IP
8. Ability to control parameters in the map-based application

9. Perpetual license

C. Software license for AES256/AES128 encryption and decryption in radio modules - 6 license

I. Program parameters:

1. AES256 encryption and decryption
2. AES2128 encryption and decryption
3. The possibility of implementing the item from the order description in radio modules
4. Perpetual license

D. Factory new, unused radio sdr module with accessories – 1 set

I. Technical parameters

1. The minimum operating frequency range is 1.98-2.55 GHz
2. Possible output power: 2x5W
3. Maximum sizes: 160mm, 160mm, 70mm
4. Minimum degree of protection: IP66
5. Maximum weight up to 2.5 kg
6. Software configurable RF bandwidth 1.25, 1.5, 1.75, 2.5, 3.0, 3.5, 5.0, 6.0, 7.0, 8.0, 10.0, 12, 0, 14.0, 16.0, 20.0 MHz
7. Tuning step: 125 kHz
8. Supply voltage: 8..18V
9. Power consumption up to 60W
10. Receiver sensitivity: -98dBm (BW 2.5MHz / BPSK 1/2)
11. Equipment:
    a) Ethernet cable
    b) Power cable
    c) Microphone
    d) Control cable
    e) Software to control all parameters in a map based application
    f) Antennas with a gain of 4.5 dBi 4 pcs
12. Possibility of transmitting in two polarities (MIMO)
13. Possible bitrate 87 Mb/s (MESH topology)
14. Minimum operating temperature range: -20 ° C to + 50 °C
15. Built-in GPS receiver
16. 64Gb of on-board storage with store & forward functionality

17. Radio interfaces:
    a) Antenna A Channel 1 receive only
    b) Antenna B Channel 1 switched transmit/receive
    c) Antenna C Channel 2 receive only
    d) Antenna D Channel 2 switched transmit/receive Wejścia /wyjścia
    e) GPS antenna interface SMA female
18. Inputs/Outputs
    a) Power and Ethernet: 6-way Amphenol 38999 series 3
    b) Ethernet: RJ45
    c) Config & data: 22-way Amphenol 38999 series 3
    d) Camera video & power 4-way Amphenol 62GB
    e) SDI/HD-SDI BNC female 75Ω
    f) USB Type A

II. Program parameters

1. COFDM transmission coding
2. Carrier modulation: BPSK, QPSK, 16QAM, 64QAM
3. Connection topology: MESH
4. Transmission compression capability: H.264 AVC / H.264 / MPEG-4 Part 10 High Profile 4.0
5. SDRAPP-MESH suport
6. Remote control: Web browser GUI and external application
7. Possibility of transmission encryption: AES 256
8. Possibility of IP addressing: static and dynamic
9. Supports two 1920x1080p30 video streams simultaneously

E. Factory new, unused radio amplifier module 5w power with accessories – 10 set

I. Technical parameters

1. Linear RMS characteristic
2. Power gain> 20dB
3. Efficiency> 16%
4. Integrated transmit / receive switch
5. Low noise RF return path, gain 4dB
6. Power 10-18V DC

7. Current consumption up to 3.5A at 10V
8. Working temperature -10..50 °C
9. 50Ω impedance
10. Weight < 150g
11. SMA-F antenna connectors
12. 7-pin control connector
13. 2 dBi gain antennas included
14. Possibility of connection with radio modules of the subject from the order description

2. Terms and condition of the Agreement.

Detailed description of the terms and condition of the Agreement are included in the Attachment No 5 SWZ.