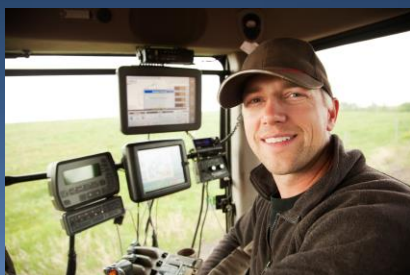


SkySweep Technologies

Dedicated Solutions for High Speed
HF/VHF/UHF DIGITAL RADIO



SkySweep Digital Radio System
Solutions for existing radios

SkyCR Controller
for existing HF/VHF/UHF Radios

Solutions for existing radios

SkyCR Controller for existing HF/VHF/UHF radios, base stations and dispatching

The SkySweep SkyCR Controller units offers various data services to be connected to other mobile stations or to fixed IP network through a base station:

- **GPS based tracking**
- **Flexible customer specific data applications**
- **E-mail**
- **Instant messaging (chat)**
- **Latest modem technologies: SkyOFDM, STANAG (5066, 4285, 4539) and MIL-STD-188-141 (ALE) compliant HF communication or VHF/UHF communication systems**
- **High Encryption AES, DES and additional customer specific encryption possible**

Based on the latest embedded technologies the professional SkyCR controller is for local stationary or mobile station use. The devices have a passive cooling system without any moving parts. It can be used with customer's existing HF/VHF/UHF transceivers.



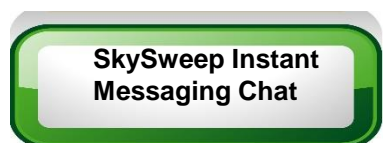
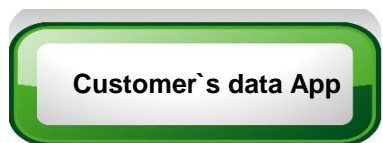
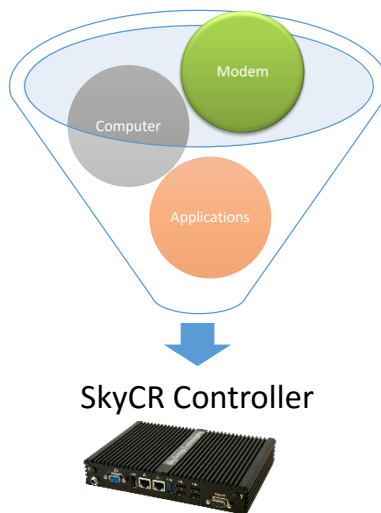
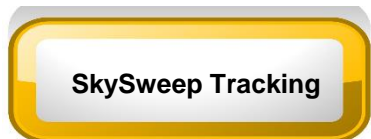
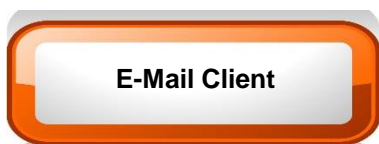
Front view

SkyCR Controller



Rear view

The SkyCR controller provide as delivered the SkySweep applications like E-Mail, instant messaging (chat), GPS based tracking, digital voice and flexible data. The platform also supports customer specific Windows™ based applications. The SkyCR controller are delivered configured and with installed software.

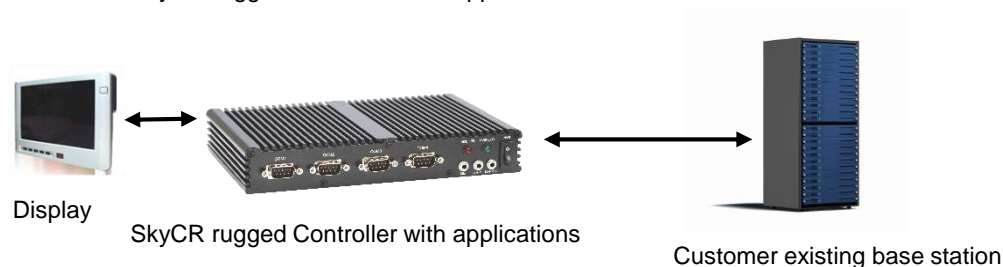
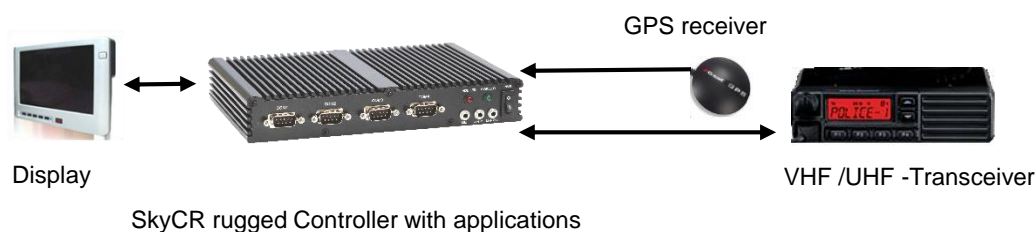
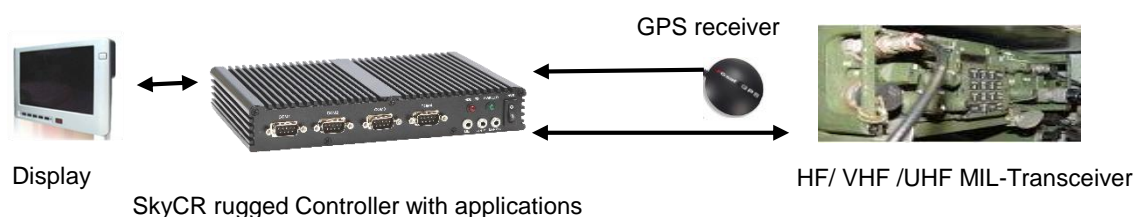


The SkySweep System Solution for existing radios provides standard RS-232 and Ethernet (TCP/IP / UDP) interfaces allowing for smooth connections to different applications and devices.

See about the SkySweep applications in detail within our separate [PDF-information](#).

Examples of typical setups: SkyCR controller unit, display, GPS receiver and an existing HF/VHF/UHF transceiver unit.

Example configuration:



General configurations with existing radios and base stations:

The SkyCR Controller can be used with existing radios and base stations in two ways:

- 1) Bypassing the radio's own modems and using the SkyCR unit with the state of art SkyOFDM modem.
- 2) Using SkySweep 5066 stack and applications with radio's own modems (connection is RS-232)

Case 1): If SkySweep modems are used instead of internal modems in customer`s own radios the connection is via the SkyCR. The connector RX, TX and PTT signals will be used in this case.

Case 2): the modems in the customer`s own radio can be used over the RS-232 interface with our STANAG 5066 protocol. In this case it will use the SkySweep 5066 stack and SkySweep modems for data or e-mail transfer.

There is also the possibility to connect a display and keyboard direct to the SkyCR Controller without a laptop. Customer`s own application software could be installed to the SkyCR in this case. The SkyCR already has all the SkySweep applications available (such as email clients, tracking client, instant messaging chat, etc.). Also laptops or mobile devices with WiFi Wireless LAN and Bluetooth can easily be connected to the controller.

*"Make use of the many HF/VHF/UHF based Data Radio communication advantages.
Connect your data sources and services with less costs."*

Specifications

STANAG 5066 v1.0/1.2 data transfer protocol

CFTP / HMTTP

Modems available for VHF/UHF Radios:

SkyOFDM up to 103 kbit/s (gross) / 88.0 kbit/s (net)

Modems available for HF Radios

SkyOFDM (HF) up to 9.6 kbit/s (net)

STANAG 4285 up to 2.4 kbit/s

STANAG 4539 up to 2.4 kbit/s

MIL-STD-188-110A/B

MIL-STD-188-141A (ALE)

Supported services:

Point-to-point data transfer

Point-to-multipoint data transfer

STANAG 5066 compliant system

High capacity IP interface between base station and fixed network

E-mail routing between base station radio interface and fixed network

E-mail (group, individual)

GPS position and status report

Data modem services

TCP/IP data interface (client, server)

UDP data interface (client, server)

RS-232 data interface

STANAG 5066 subnet data interface

POP3 data interface

SMTP data interface

High Encryption AES, DES and additional customer specific encryption possible

API for customer specific applications

Automatic data rate change

External modem support

Data compression

Advanced collision avoidance

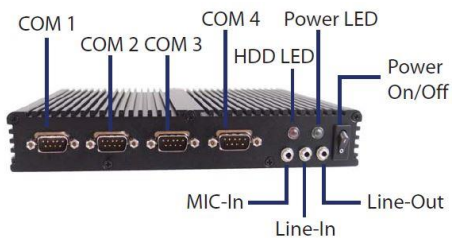
Instant messaging (Chat Client)

Standards and declarations:

CE, EN 300 086-2 V1.1.1, EN 300 113-2 V1.4.1, EN 301 489-01 V1.8.1, EN 301 489-05 V1.3.1, EN 60065:2002



Note: SkySweep data radio specifications might be subject to change due to product innovation and improvements without prior notice.



CPU	Intel® BayTrail-D SoC Processor
Sizes	(LxWxH) 210 x 135 x 35mm
Interfaces	<p>Front:</p> <ul style="list-style-type: none"> 1x Radio RX (Line-Out), 1x Radio TX (Line-In), 1x Mic In 4x COM (COM 1-2 supports RS-232/422/485, COM 3-4 supports RS-232) 1x Power Button, 1x Power LED, 1x HDD LED 1x WiFi status LED (optional) <p>Rear:</p> <ul style="list-style-type: none"> 1x DC JACK 1x VGA 1x HDMI 1x USB 3.0 4x USB 2.0 2x RJ-45 Ports (GbE) 1x DIO (1x 8-bits programmable DIO (4-In, 4-Out)) Wireless-LAN (Optional)
Temperature range	0 to +50°C, Storage Temp - 20 to + 80 °C; Humidity: 0% - 95%
Power & consumption	DC 12V 20 W
Cooling	Passive with internal heat pipes

SkySweep Technologies

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About SkySweep Technologies Oy

Operating World Wide the SkySweep Technologies provides HF/VHF/UHF digital voice and data radios, IP based data radios, controllers, high speed modems, protocols and applications.

Customers include Military, Embassies, public safety, transport companies, telecommunications operators, utilities, international aid organizations, oil and gas companies and security organizations. SkySweep digital radios are optimized for performance in harsh environments, supporting TCP/IP, STANAG5066, serial data and customer applications.

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