RC2143

RC2100

The RC2100 Series is the second generation handheld controllers from MilDef.

Keeping true to the MilDef brand the RC2100 puts emphasis on low weight, ergonomics and a fully rugged design.

With a MilDef DS tablet and RC2100 you will never lose control!

Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally proven, MilDef products are actively employed in military operations in over 60 countries.

Customizable

Are you looking for additional features and functions? MilDef specializes in customized solutions, to include change of connectors, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you tailor a solution to meet your exact requirements.

Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

Features

- USB HID Joystick
- 5 VDC

RC2143 Issue 03, 2025-02-20.

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Connector Interfaces

(top)	•	1x ETH 1000BASE-T
(left side)	•	1x ETH cable to tablet
(top)	•	1x Pass through - Power input tablet
(right side)	•	1x Power cable to tablet
(bottom)	•	1x USB 2.0
(left side)	•	1x USB 2.0 cable to tablet

Other Interfaces

32x Buttons with backlight (front)
2x Joystick (front)
2x Thumb wheel (back)
2x Thumb wheel (front)

Technical Specification

Supported tablets	MilDef DS11 MilDef DS13 (Sold separately)
USB HID	USB HID Joystick
Power consumption	2.5 W
Power input	5 VDC
Power supply	Powered by tablet
Battery hot swap	Support tablet battery hot swap
Neck strap	Support the use of a neck strap
Weight	1.2 kg (2.7 lbs)
MTBF	> 25,000 h
CE	Compliant

Environmental Specification

High temperature - Operating	MIL-STD-810G, method 501.5, Procedure II - Operation 60 °C (140 °F)
High temperature - Storage	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
Humidity	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 % RH Ten 24 h cycles
IP Class (Solid Particle Protection)	IP Class 6X
IP Class (Water)	IP Class X5
Low air pressure - Operating	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4,572 m (15,000 ft)
Low temperature - Operating	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
Low temperature - Storage	MIL-STD-810G, method 502.5, Procedure I - Storage -40 °C (-40 °F)
Noise level	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
Vibration - Helicopter	MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
Vibration - Loose cargo	MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
Vibration - Tracked vehicles	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles

EMC Specification

EMI radiated RE102	MIL-STD-461F, Method RE102, Radiated emissions, electric field Navy Fixed & Air Force 2 MHz - 18 GHz 44 dBµV/m, >= 25 meters Nose to Tail
ESD	EN61000-4-2:2009 Level 3 EN55024:1998 Performance criteria B + A1:2001 + A2:2003

Connector Pinout

- Fischer DBPU-102-A059-149E (top)

Pin #	Signal
1	ETH 1000BASE-T - D1-
2	ETH 1000BASE-T - D1+
3	ETH 1000BASE-T - D2-
4	ETH 1000BASE-T - D2+
5	ETH 1000BASE-T - D3-
6	ETH 1000BASE-T - D3+
7	ETH 1000BASE-T - D4-
8	ETH 1000BASE-T - D4+
9	NC

RJ45 plug on cable (left side)

Pin #	Signal
1	ETH cable to tablet - TX+_D1
2	ETH cable to tablet - TX-_D1
3	ETH cable to tablet - RX+_D2
4	ETH cable to tablet - BI+_D3
5	ETH cable to tablet - BI-_D3
6	ETH cable to tablet - RX-_D2
7	ETH cable to tablet - BI+_D4
8	ETH cable to tablet - BI-_D4

Fisher UR02W07 F003S BK1 E2AB (top)

Pin #	Signal
1	Pass through - Power input tablet - Power input return
2	Pass through - Power input tablet - Power input
3	NC

- Fisher UP01Q07 M003S BK1 Z2ZA on cable (right side)

Pin #	Signal
1	Power cable to tablet - Power return
2	Power cable to tablet - Power
3	NC

- Fischer DBPU-102-A054-149 (bottom)

Pin #	Signal
1	USB 2.0 - Vbus
2	USB 2.0 - D-
3	USB 2.0 - D+
4	USB 2.0 - GND
5	NC

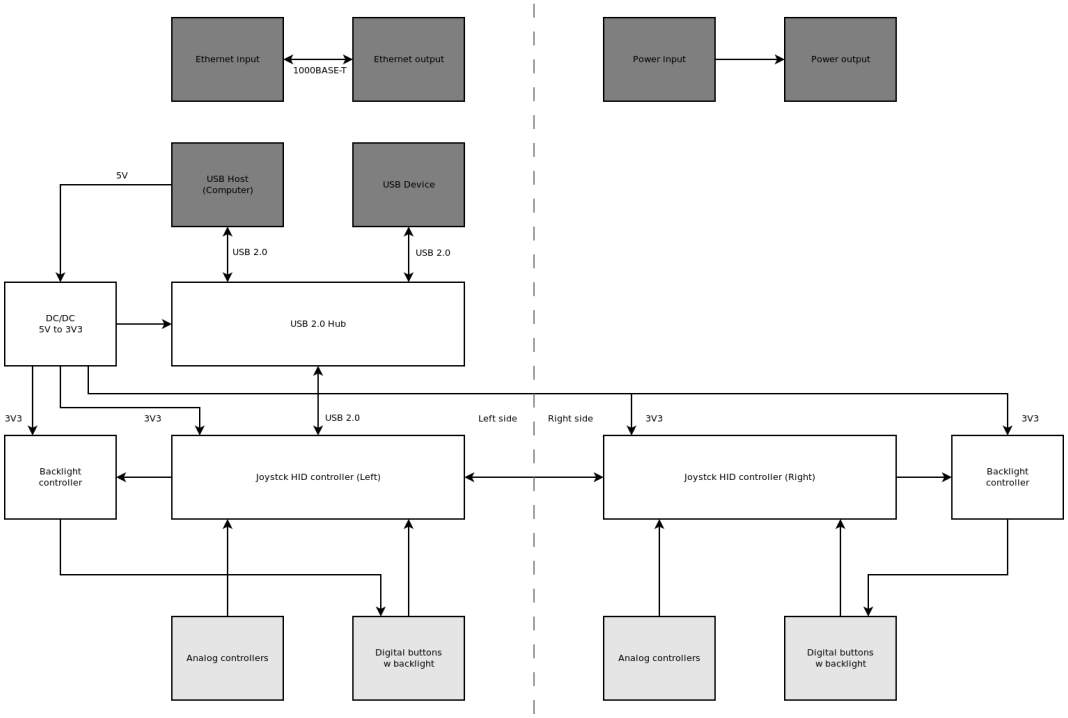
USB-A on cable (left side)

Pin #	Signal
1	USB 2.0 cable to tablet - Vbus
2	USB 2.0 cable to tablet - D-
3	USB 2.0 cable to tablet - D+
4	USB 2.0 cable to tablet - GND

Additional Info

With tablet (sold separately)

Block Diagram



Dimensions with tablet (sold separately)