silex technology WDCU3310 Wireless E84 Digital Communication Unit User Manual

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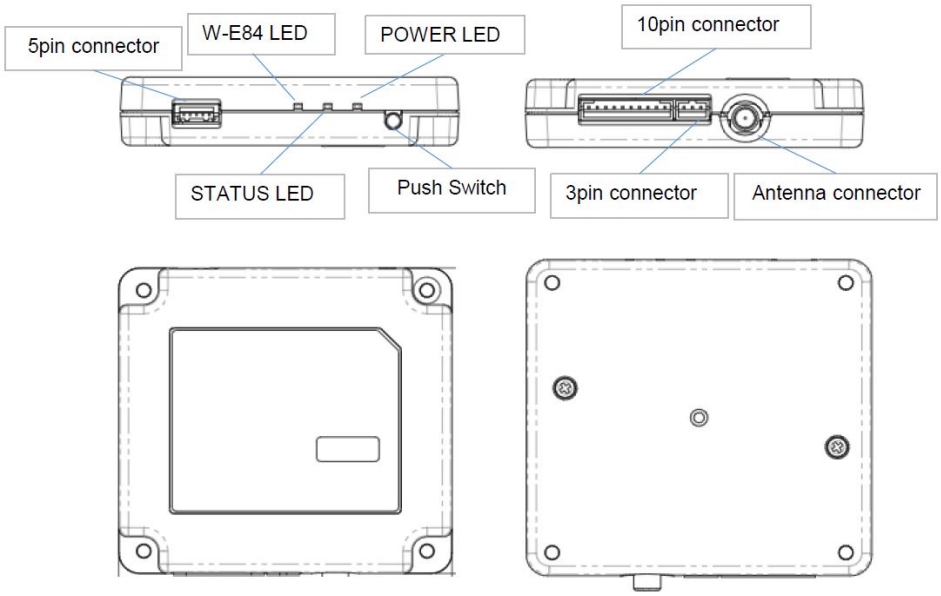
WDCU-3310 is a device that E84 interlock communication by wireless communication during FOUP transfer

between the OH Overhead Hoist Transfer and semiconductor manufacturing equipment. The WDCU-3310 is equipped on the OHT.

Parts and Functions



Parts and Functions		
POWER LED	Green light on	Power On
	Green light flashing	Program changing
	Orange light on	Initializing process
	Red light on	Hardware error
	Green light on	Power On

STATUS LED	Green light flashing	Setting various parameters of wireless E84 communi cation unit from wireless converter or OHT controller
	Orange light flashin g	During PIIO data communication between the wireles s converter or OHT control unit and the wireless E84 communication unit
	Red light on	Communication error occurred between wireless con verter or OHT control unit and wireless E84 communi cation unit
W-E84 LED	Green light on	Power On(2.4GHz)
	Green light flashing	Communicating in the 2.4 GHz band
	Orange light on	Power On(5.8GHz)
	Orange light flashin g	Communicating in the 5.8 GHz band
	Red light on	An error occurred in communication with the wireless E84 device

3pin connector	Debug port
5pin connector	CPU internal ROM writing only used in the factory
10pin connector	Connect to Wireless LAN converter (FBR-3250) or OHT
Antenna connector	Connect the antenna
Push Switch	Used to initialization settings

Setup

Use a dedicated cable to connect the 10-pin connector to FBR-3250 or OHT. Power supplied from OHT and the WDCU-3310 is controlled by the OHT controller.

Basic configration	
Wireless Frequency Band	ISM 2.4GHz,5.8GHz
Wireless Channel	Ch3~Ch80(2.4GHz) Ch2~Ch100(5.8GHz)
Wireless Channel Width	1MHz
Channel Power setting	20dBm~0dBm(2.4GHz) 20dBm~+2dBm(5.8GHz)
Channel Period	10,20,30,40,50ms
Receive timeout	100~60000ms
Commnication timeout	100~5000ms
Pairing threshold level	80~-24dB No threshold

SPECIFICATION

Specification	
Operating environment	Temperature 0~+40℃ Humidity 20~80%RH(Non condensing)
Strorage environment	Temperature 10~+50℃ Humidity 20~90%RH Non condensing
Power supply	DC24V
Wireless I/F	short-range wireless(2.4GHz/5.8GHz)
Push Switch	initializaition swtich ×1
LED	POWER LED Green/Red/Orange STATUS LED Green/Red/Orange W-E84 LED Green/Red/Orange

- Supplier’s Declaration of Conformity
- 47 CFR 2.1077 Compliance Information Unique Identifier: WDCU-3310
- Responsible Party – U.S. Contact Information

- **Responsible Party Name**: silex technology America, Inc.
- **Responsible Party** Address:East Sandpointe, #245 Santa Ana, CA 92707
- Phone: 657-218-5199

FCC Compliance Statement
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions

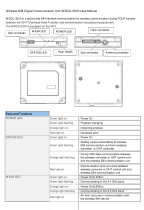
- This device may not cause harmful interference, and this device must accept any interference received, including interference undesired.

FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Compliance with FCC requirement 15.407
Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the and can radiate radio frequency energy and, if not installed and used in accordance with the instruction packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinue transmission in case of either absence of information to transmit or operational failure.Frequency Tolerance: ±60 ppm. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines as this equipment has very low levels of RF energy.

Documents / Resources

	silex technology WDCU3310 Wireless E84 Digital Communication Unit [pdf] User Manual WDCU3310, N6C-WDCU3310, N6CWDCU3310, WDCU3310 Wireless E84 Digital Communication Unit, WDCU3310, Wireless E84 Digital Communication Unit