

# EBS-40

## Base station

The EBS-40 is the base station that is used to communicate with the ESL's and the ESL Server Software.



## Highlights

- Ideal for updating product information, prices and to control stock levels from a centralized location
- Saves time and minimizes errors
- Lightweight infrastructure
- Suitable for small retail to multi-store business
- Implementation of the base station is very simple
- Centralized administration for all devices with full visibility
- Works smoothly with the Opticon ESL Server Software
- Low power consumption
- 802.15.4 based protocol
- 2.4 GHz
- Two ethernet ports
- Communicate bi-directionally with ESLs
- Each base station covers a 25-meter indoor radius
- One EBS-40 base station can load 2,500 ESLs

# EBS-40

## Product Specifications

### Operation

CPU: Cortex M4 32-bit MCU

Clock frequency: 120 MHz

### Memory

Internal flashrom: 512 kB

Internal RAM: 256 KB

External RAM: 8 MB

### Operating indicators

Ethernet: 10 Mbit/sec & 100 Mbit/sec, half duplex & full duplex

Modulation: DSSS

Band: 2.4 GHz, 16 channels (2405-2480 MHz)

Transfer speed: 250 Kbits/sec (>10.000 complete image updates per hour with 2" ESL)

Max. load: Up to 2,500 ESLs per base station (with EE-201 and default ESL settings)

Range: typical 25 meter indoor; 100 meter open-field

Protocol: IEEE 802.15.4 based

Encryption: None (default); 256-bit AES encryption (on request)

### Power

Voltage requirement: Min. 4.5V, Max 6.6V

Current consumption: 200 mA

### Durability

Temperature in operation: -10 to 50 °C / 14 to 122 °F

Temperature in storage: -20 to 60 °C / -4 to 140 °F

Humidity in operation: 20 - 85% (non-condensing)

Humidity in storage: 20 - 85% (non-condensing)

### Physical

Dimensions without antennas (WxHxD): 145.1 x 110.1 x 32.4 mm / 5.71 x 4.33 x 1.28 in

Weight: Ca. 250 g / 8.8 oz (incl. antennas)

### Regulatory & Safety

Product compliance: FCC, RoHS, EN60950-1, IEC60950-1, EN55022, EN55024, CE, REACH, Anatel

Din mounting rail for wall or ceiling: 35 mm x 7.5 mm (W x H), minimum length is 100 mm