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. All electronic shelf labels are connected to the same network and content management system, which is connected to the back-office system.

Highlights

- Ideal for updating product information, prices and to control stock levels from a centralized location
- Saves time and minimizes errors
- Efficient infrastructure
- Suitable for small retail to multi-store businesses
- Implementation of the base station is very straightforward
- Centralized administration of all devices with full visibility
- Works in tandem 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-214 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)

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

Regulatory & safety
Product compliance: FCC, RoHS, EN60950-1, IEC60950-1, EN55022, EN55024, CE, REACh, Anatel

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