The ITC2100-BOS base station is a fundamental component in wireless alert systems.
This ITC2100-BOS is a modern radio base station for deployment in synchronized POCSAG paging alert networks. The ITC2100-BOS is backwards compatible to its predecessors ITC2000 and ITC600, and can be added to these alert networks as well, for example as a network extension.

The ITC2100-BOS facilitates both large-area synchronized alerts across the entire network infrastructure and local.

The ITC2100-BOS can be programmed and implemented quickly using web browser, both on location or remotely. Installed in a compact wall-mount case, the ITC2100-BOS forms the foundation for secure and reliable alerting.

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## General

| General | |
|---|---|
| Operational temperature range | -25°C to +55°C |
| Cooling system | Convection (optional with fan in wall-mount case) |
| Input voltage | 90-264VAC/ 47-63Hz |
| Power consumption | max.150W (optional: max.200W) |
| Internal bus system | AT96 (96pin-DIN41612) |
| Compliance with EU regulations | ETS 300113, ETS 300086, EN 60950, EN 50081-2, EN 50082-2, EN 61000-3-2/3 |

| General radio data | |
|---|---|
| Frequency bands (versions) | Standard:    144-174MHz<br>On request:  66-88MHz / 174-225MHz  / 216-266MHz<br>400-470MHz / 450-530MHz |
| Frequency stability (carrier) | ±1.5ppm |
| Number of channels (per frequency band) | 99 |
| Channel spacing | 12.5/20/25kHz |
| Type of modulation/ demodulation | DFSK max.  2.5kHz (at 12.5kHz channel spacing)<br>DFSK max.    4kHz (at    20kHz channel spacing)<br>DFSK max.    5kHz (at    25kHz channel spacing)<br>FM/PM 300 … 3000Hz |
| Switching bandwith | Whole frequency band |
| POCSAG data rate | 512, 1200 or 2400 baud |
| Antenna connection | 50 ohm coax N-type<br>(1x for transmission, 1x for reception) |

| Transmitter (Tx) | |
|---|---|
| Tx output power | 1-25 W, configurable in 1W-steps |
| Intermodulation attenuation | > 40dB |
| Adjacent channel power | < -70dBc  (at 20kHz channel spacing) |
| Spurious emissions | < 250nW (30MHz to 1GHz) |

| Receiver (Rx) | |
|---|---|
| Sensitivity | <2µV (EMK) to decode 90% of digital alerts<br><-118dBm at 12dB SINAD (0.282µV) |
| Co-channel rejection | > - 8dB |
| Adjacent channel selectivity | > 70dB (at 20kHz channel spacing) |
| Spurious response rejection | > 70dB |
| Blocking | > 90dBµV (±1MHz to ±10MHz) |
| Spurious radiations | < 2nW (30MHz to 1GHz) |
| Intermodulation response rejection | > 70dB |

| Controller (BSC) | |
|---|---|
| CPU | 500MHz |
| RAM | 512 MB |
| Flashdisk (solid state memory) | 512 MB |
| Operating system | Linux |
| Peripheral interfaces | 1x COM, 1x RJ45 (10/100 Base T Ethernet,<br>4x USB (2x external, 2x internal), PS/2-keybord (mini-DIN), VGA (DB15), mouse |

| Power supply (PS) | |
|---|---|
| Maximum output voltage/current | 13.8V / 8A and 5V / 5A (at 150W)<br>optional: 13.8V / 13A and 5V / 5A (at 200W) |
| Battery low level protection | yes |
| Efficiency | 80%, 10-15A typical charge |
| Connection for rechargeable battery | Screw connectors, 12V |
| Autonomy (optional battery operation) | > 4h<br>with battery 12V 12Ah<br>(at Tx output power of 25W and duty cycle 25%) |

| Base station only (without wall-mount case) | |
|---|---|
| Dimensions (WxHxD) | 483mm (19" rack) x 134mm (3U) x 315mm |
| Weight | 8.5kg |

| Base station assembled in wall-mount case | |
|---|---|
| Dimensions (WxHxD) | 600mm x 350mm x 500mm (internal 19", 6U) |
| Weight | 36.5kg (assembled with battery) |
| Protection class | IP42 |

Specifications subject to change



Consisting of:
• Power supply (PS)
• Controller (BSC)
• POCSAG decoder card (RC)
• POCSAG synchro card (SC)
• Transceiver (TRx)



Additional modules:
• For multimaster operation: GPS antenna and GPS interface card (S-Com)
• I/O card



Base station assembled in wall-mount case

Options
• Fan and temperature sensor in wall-mount case for active cooling
• Higher Tx output power on request