

Specifications
BTS Model-I

Air interface	1xEV-DO Rev.A, 3 sectors, 8 carriers (max.)
Frequency bands	800 MHz (Band class 0), 2 GHz (Band class 6)
RF power output	10 W / carrier / sector
Interface to RAN	E1/T1 x 24, Fast Ethernet x 2
Maintenance interface	SNMP, FTP, etc.
Redundancy configuration	Duplex / N+1 redundancy configuration
Power consumption	8.5 kW(max.)
Input voltage	+27 VDC (+21 V – +30 V)
Size	700 (W) x 600 (D) x 1,800 (H) mm
Mass (weight)	450 kg (max.)
Operating temperature	0 to 50 °C

BTS Model-II

Air interface	1xEV-DO Rev.A, 3 sectors, 4 carriers (max.)
Frequency bands	800 MHz (Band class 0), 2 GHz (Band class 6)
RF power output	10 W / carrier / sector
Interface to RAN	E1/T1 x 12, Fast Ethernet x 2
Maintenance interface	SNMP, FTP, etc.
Redundancy configuration	Duplex / N+1 redundancy configuration
Power consumption	2.8 kW(max.)
Input voltage	+27 VDC (+21 V – +30 V)
Size	700 (W) x 600 (D) x 1,000 (H) mm
Mass (weight)	220 kg (max.)
Operating temperature	0 to 50 °C

BTS Model-III

Air interface	1xEV-DO Rev.A, 3 sectors, 4 carriers (max.)
Frequency	800 MHz (Band class 0), 2 GHz (Band class 6)
RF power output	10 W / carrier / sector
Interface to RAN	E1/T1 x 12, Fast Ethernet x 2
O&M interface	SNMP, FTP, etc.
Redundancy	Duplex / N+1 redundancy configuration
Power consumption	2.8kW (max.)
Input voltage	+27 VDC (+21 V – +30 V)
Size	380 (W) x 600 (D) x 1,800 (H) mm
Mass (weight)	220 kg (max.)
Operating temperature	0 to 50 °C

Pico Cell (BTS)

Air interface	1xEV-DO Rev.A, 1 carrier, 1sector
Frequency	800 MHz (Band class 0)
RF Power output	0.05 W – 0.5 W / carrier / sector
Interface to RAN	E1/T1 x 3, Fast Ethernet x 1
Power consumption	Approx. 120 W
Input voltage	-48 VDC
Size	Approx. 15 L
Mass (weight)	Approx. 9 kg

CR

Interface to BTS	E1 / T1 x 432 lines (max.)
LAN interface	Gbit Ethernet
O&M interface	SNMP, FTP, etc.
Redundancy configuration	Duplex / N+1 redundancy configuration
Power consumption	5.0 kW (max.)
Input voltage	-48 VDC ±10 %
Size	795 (W) x 600 (D) x 1,800 (H) mm
Mass (weight)	300 kg (max.)
Operating temperature	5 to 40 °C

BSC

Call processing	4,000 call/s
O&M interface	SNMP, FTP, etc.
Redundancy configuration	Duplex / N+1 redundancy configuration
Power consumption	13.2 kW (max.)
Input voltage	-48 VDC ±10 %
Size	795 (W) x 600 (D) x 1,800 (H) mm
Mass (weight)	300 kg (max.)
Operating temperature	5 to 40 °C

IP-SW

Interface to CR, BSC	Gbit Ethernet x 192 lines (max.)
O&M interface	SNMP, FTP, etc.
Redundancy configuration	Duplex configuration
Power consumption	3.8 kW / rack (max.)
Input voltage	-48 VDC ±10 %
Size	695 (W) x 900 (D) x 1,800 (H) mm x 2 racks
Mass (weight)	390 kg / rack (max.)
Operating temperature	5 to 40 °C

O&M System

Interface	Fast Ethernet x 6 lines, Gbit Ethernet x 1 line
Operation interface	SNMP, FTP, etc.
Power consumption	5.0 kW (max.)
Input voltage	100 VAC
Size	695 (W) x 900 (D) x 1,800 (H) mm
Mass (weight)	580 kg (max.)
Operating temperature	10 to 35 °C

PDSN

PPP session	1,450,000 sessions (max.)
IP protocol	Simple IPv4 / Mobile IPv4
PPP	IETF RFC1661
3GPP2	3GPP2 A.S0009, 3GPP2 X.S0011-D
Charging / authentication	IETF RFC 2865 / 2866
O&M interface	SNMP, FTP, etc.
Redundancy configuration	Duplex / N+1 redundancy configuration
Power consumption	5.0 kW (max.)
Input voltage	-48 VDC ±10 %
Size	795 (W) x 600 (D) x 1,800 (H) mm
Mass (weight)	500 kg (max.)
Operating temperature	10 to 35 °C

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 · All other trade names are the property of their respective owners.

To ensure safety and normal operation, be sure to read the operation manual carefully before using the instrument.
 Specifications are subject to change without notice.

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ER2000 1xEV-DO System



**Hitachi ER2000 1xEV-DO system:
 Product Group for
 Total Infrastructure Solutions.**

The ER2000 1xEV-DO system is a product group offering advanced Hitachi CDMA 1xEV-DO solutions. Consisting of RAN devices, such as BTSs, a BSC and an O&M system, and a PDSN, the ER2000 is a proven product that has been in commercial service for many years.

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Total CDMA 1xEV-DO solutions that are high performance, reliable and expandable to meet a wide range of requirements.

Hitachi, a leading worldwide supplier of CDMA 1xEV-DO, offers all necessary CDMA 1xEV-DO infrastructure equipment. The ER2000 Series has been selected for the commercial service of CDMA 1xEV-DO since 2003. Hitachi is one of the pioneers of CDMA 1xEV-DO, and has been contributing to its technology, performance assessment and standard establishment from the early stages of these worldwide activities. As a result, we confidently provide CDMA 1xEV-DO solutions to meet the next generation of advanced mobile services.


BTS

- Hitachi's unique design realizes a single BTS to accommodate two bands (800MHz, 2GHz) and up to eight carriers
- A high efficiency amplifier reduces power consumption.




CR

- High capacity line accommodation is achieved by dedicated circuit design.
- Maximum capacity: 432 circuits (TI); maximum multi-link number: 12 circuits.




BSC

- High performance throughput and processing capacity is achieved by dedicated circuit design and high density board design and packaging.




IP-SW

- IP-SW is a redundant switch system that meets the requirement for EV-DO RAN environment.



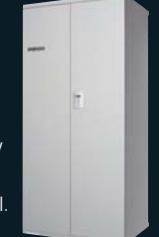
O&M System

- Can manage BTS, CR, BSC and IP-SW.
- Can manage several thousand BTSs.



PDSN

- High performance throughput and processing capacity is achieved by dedicated circuit design and high density board design and packaging.
- Supports QoS, Always On and Flow Control.



CDMA 1xEV-DO Rev.A standards

- Forward data rate: 3.1Mbit/s; Reverse data rate: 1.8Mbit/s; BCMCS and QoS support.
- These promise diverse broadband services such as high speed download, broadcast/multicast of moving images and video telephony.
- VoIP over EV-DO also can be realized.

Full lineup of solutions

- Hitachi provides all components, BTS, CR, BSC, IP-SW, PDSN and O&M System. Our full lineup is able to meet all your needs for standards enhancement and function expansion.
- The O&M System controls all the RAN components through a unified operation control interface.

System flexibility and expandability

- Multi-processor architecture allows starting with a small configuration and expanding it as required.
- Additional processing capability for increasing users and function expansion is realized by add-on processor boards.

High performance

- BTS: Highly integrated design accommodates Rev.A eight carriers times three sectors with RF power amplifier in one rack.
- Network components: High throughput, call processing capacity and number of sessions by specialized hardware.

Fault tolerance

- High system reliability realized by duplex configuration and N+1 redundant configuration.

