

ENCLOSURE 6140 AC HEX/CONVECTION COOLING

The Enclosure 6140 AC is a multi-purpose site cabinet designed to support a multitude of equipment besides baseband and transmission. It also provides a highly capable power system and battery back-up - all in a streamlined design and minimized footprint to support cost efficient expansion of mobile broadband.

Being an all-in-one enclosure the Enclosure 6140 AC is a very fitting choice for all types of sites where the battery back-up need is small to medium.

With a robust design, IP55 compliance and a sealed Heat Exchanger (HEX) climate system the Enclosure 6140 AC ensures optimal environmental protection of the active equipment - enabling them for a long-lasting service. It provides a convection cooled battery compartment for cost efficient operations. The complete system is also integrated and verified for the entire Ericsson Radio System and ensures best-in-class service.

The power system offers 12kW of power in total and provides 8kW of -48V DC power for both internal and external consumers. The enclosure can support up to 18 external radios with both DC power and CPRI connectivity. Additionally, space for up to 210Ah of lead-acid battery is available.

The equipment space allows 10U of rack space, ensuring well enough capacity for existing need and future expansion. In addition, it is vendor agnostic allowing other telecom equipment than ERS.

One of the main advantages of the Enclosure 6140 AC is its default integration with OSS - allowing for advance remote monitoring and control such a fault management (alarms), inventory management and performance measurements.



Technical specification for Enclosure 6140 AC HEX/Convection cooling

CAPACITY

Rack space user equipment	10U (19" rack)
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Hardware capabilities	Support for multi-standard remote radios (RRU or AIR) ERS Baseband and Transport units Lead-acid batteries Telecom equipment Additional power feed available as option
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MECHANICAL SPECIFICATION

Weight	175 kg (excluding active equipment)
Dimension (H x W x D)	1605 x 700 x 750 mm (incl. Base frame)
Base frame height	150 mm
Mounting position	Ground
Enclosure material	Galvanized steel
Color	Powder paint NCS 2002-B
Door	Front access
Rack type	19" (IEC 60297-3-100)
Locking type	Pad lock
Battery compartment	1x 210Ah string

POWER SYSTEM

Input voltage	3P+N+PE: 346/200-415/240 VAC 2P+N+PE: 208/120-220/127 VAC 1P+N+PE: 200-250 VAC
Input power	<13kW
Output load (-48VDC)	8kW
Total capacity	12kW
AC SPD	Class 2
DC output	>10kA 8/20µs
PSU Slots	4x
Service outlet	Optional
Power system height	6U
Priority load	6x Circuit Breaker
Main load	9x Circuit Breaker
CB ratings	6A / 10A / 16A / 25A / 32A / 63A / 125A
Battery Interface	2x Circuit Breaker
Battery Circuit Breaker rating	200A
PSU capacity	3000W
PSU efficiency	93% / 96%
PSU output voltage (nominal)	-48VDC
PSU rated current	50A
PSU power factor	≥0.99@220Vac/50A
PSU emissions	EN 55022 Class A
Ingress protection power system	IP20

ENVIRONMENTAL SPECIFICATION

Ingress protection	IP55
Environment	Class 1.2 (Storage) Class 2.3 (Transport) Class 4.1 (Operation) ETSI EN 300 019-1-1
Relative humidity	15-100%

CLIMATE SYSTEM EQUIPMENT COMPARTMENT

Type	Heat Exchanger
Temperature range	-33°C to +50°C*
Cooling capacity	1850W
Heater	Optional

CLIMATE SYSTEM BATTERY COMPARTMENT

Type	Convection cooling
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CABLE I/O

Entry point	Bottom
Plinth cable access	Rear and side access
AC In	1x Ø16-35mm
DC Out (shielded)	18x Ø10-18mm
DC In (battery feed)	4x Ø19mm
Signal Cable Outlet	10x Ø10mm
Signal Cable Inlet	8x Ø6mm
Optical	22x Ø6mm
Punched holes	3x Ø26mm

REMOTE MANAGEMENT

External Alarms	32x
Fault Management	Following alarms are sent to OSS: <ul style="list-style-type: none">- Mains Failure- Low Voltage Disconnect- Battery Disconnect- System Voltage- SPD- Load Fuse- Battery Fuse- Battery Temperature- Battery Current- Rectifier Current- Rectifier Communication- Rectifier Fan- Cabinet Fan- Cabinet Door
Performance Management	Alarms can be set for all Performance Data parameters Following data is sent to OSS: <ul style="list-style-type: none">- System Voltage- System Current- System Power- Total Delivered Energy- Battery Temperature- Battery Voltage- Battery Current- Battery State of Charge- Rectifier Output Voltage- Rectifier Output Current- Rectifier Input Voltage- Rectifier run time

Configuration Management	<p>Following parameters can be set remotely from OSS:</p> <ul style="list-style-type: none"> - Float Charge Voltage - Elevated Charge Voltage - Battery Disconnect Voltage - Load Disconnect Voltage - Temperature Compensation - Battery Capacity - Alarm limits for all analogue values - Rectifier Current Limit
Inventory Management	<p>The inventory record from production is stored in Cabinet controller and can be fetched remotely. Inventory record can be updated in case of HW replacement</p> <p>Inventory record covers:</p> <ul style="list-style-type: none"> - Cabinet Controller - Power Controller - Rectifiers - Cabinet - Battery Test Record

*Configuration dependent – please refer to CPI