CERN — European Organization for Nuclear Research

EP-ESS Group
Subracks (Crates) for LHC

Updated: 27 August 2003

2004 DELIVERIES

Orders are now being accepted for subracks required for delivery in 2004. See below.

- User notes - important operating information NEW
- Users manual NEW
- Prices, ordering information and delivery schedule
- Commercial & technical help
- Mechanical drawings
- Custom backplanes
- Access to the VME64x RJ0 connector
- Live insertion & extraction
- Photographs
  - Prototypes
  - Production subracks NEW
- Presentation of prototypes
- IEEE mechanical specifications
- Radiation and magnetic field tolerant subracks

PRICES, ORDERING INFORMATION & DELIVERY SCHEDULE

IMPORTANT NOTES:

1. For commercial reasons, access is restricted to price lists and drawings. Please apply to Gilbert Dumont or Chris Parkman for the password.
2. Before ordering, please discuss your requirements with Gilbert Dumont before deciding on any particular configuration, in particular the design of custom backplanes.
3. Purchases will be made under contract B1186/EP "Subracks for LHC Experiments".
4. The prices in this list are subject to contractual revision for deliveries after 31 December 2003.

Parts list and prices
Click here for a complete list of subrack modular elements with part numbers and prices.

2003 orders
The first two batches have been delivered. The first batch has been tested by EP-ESS and a number of minor problems rectified. This batch is being progressively delivered to owners. The second batch will also be tested by EP-ESS as soon as possible. The third batch is scheduled for November. Contact Gilbert Dumont for more detailed information on your specific order.

2004 orders
Orders for crates to be delivered in 2004 will be accepted by EP-ESS Group as from 1 September 2003. Please discuss your requirements with Gilbert Dumont. Orders will only be confirmed after the transfer of the necessary funds to the ESS account. Delivery is foreseen in three batches, normally in March, June and October 2004.

OUTLINE MECHANICAL DRAWINGS

The following basic variants are available (all 21 slots, with 2U fan-trays). Other mechanical, electrical and backplane configurations are possible, contact Gilbert Dumont for more information.

6U with local air-cooled power supply (Variant 2)
VME64x or custom backplane
Total height 7U+2U=9U (access to RJ0, RJ2) - Drawing
Total height 6U+2U=8U (access to RJ2, no access to RJ0) - Drawing

6U with remote water-cooled power supply (Variant 1)
VME64x or custom backplane, 6Ux160mm rear transition modules
Total height 7U+2U=9U (full access to RJ1, RJ0 & RJ2) - Drawing

9U with local air-cooled power supply (Variant 2)
VME64x and/or custom backplanes, 6Ux220mm rear transition modules.
Total height 10U+2U=12U (access to RJ0, RJ2 & RJ3) - Drawing
Total height 9U+2U=11U (access to RJ2 & RJ3, no access to RJ0) - Drawing

9U with remote water-cooled power supply (Variant 1)
VME64x and/or custom backplanes, 9Ux220mm rear transition modules
Total height 10U+2U=12U (full access to RJ1, RJ0, RJ2 & RJ3) - Drawing

9U with remote air-cooled power supply (Variant 1- Lab.)
VME64x and/or custom backplanes, 9Ux220mm rear transition modules
Total height 4U+10U+2U=16U (full access to RJ1, RJ0, RJ2 & RJ3) - Drawing

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CUSTOM BACKPLANES

Standards
All backplanes must conform to the dimensions given in the ANSI VITA 1.1 (VME64 Extensions - VME64x) & associated IEEE1101.1 & .11 specifications.
Drawings of specific implementations are given below as examples.

VME64x J1/J0/J2

A drawing of the backplane with all mounting holes. The odd numbered holes, number (1, 3, 5... from left to right) are isolated, whereas the even holes (2, 4, 6...) are grounded. The backplane is normally fixed using all the odd holes with one screw for grounding in the middle marked with ground symbol. The position of the power connections is also given.

VME64xP ("VIPA") J1/J0/J2
A drawing of the backplane with power connection positions, given as an example only for possible use with custom backplanes.

J3 (J5/J6) backplane
An example of a J5/J6 backplane.
