RICH Services Block Diagram

PATCH PANELS

ELECTRONIC PANEL

Power supply system
compatible with CLAS12

EPICS

EQUIPMENTS RACK

5

138

1.1 kV / 1mA

RG58

138

HTC-50-1-1
⌀**3.2mm**

138
ADAPTER
BOARD
1:3

400
MAPMT
0.25 W

HV
BOARDs
A1536
32 channels
3kV/1mA

JUNCTION
BOX

Ethernet

CONTROL
(CPU)

Power
Supply Units
600+1200W

CONTROL
ROOM

CAEN SY4527
19" wide, 8U

LV
BOARDs
A2518
8 channels
8V/10A
floating!

5

35
5V / 4 A

sense

JUNCTION
BOX

1:2

69

Alphawire
4 x 20AWG
⌀**5.3mm**

138
FPGA
BOARD
5 V 1 A

138
ASIC
BOARD

5
SSP
BOARDs

35

JUNCTION
BOX

3

MTP TRUNK

35
⌀**3.0mm**

MTP - LC
1:4

19" wide

RICH DETECTOR (1 SECTOR)
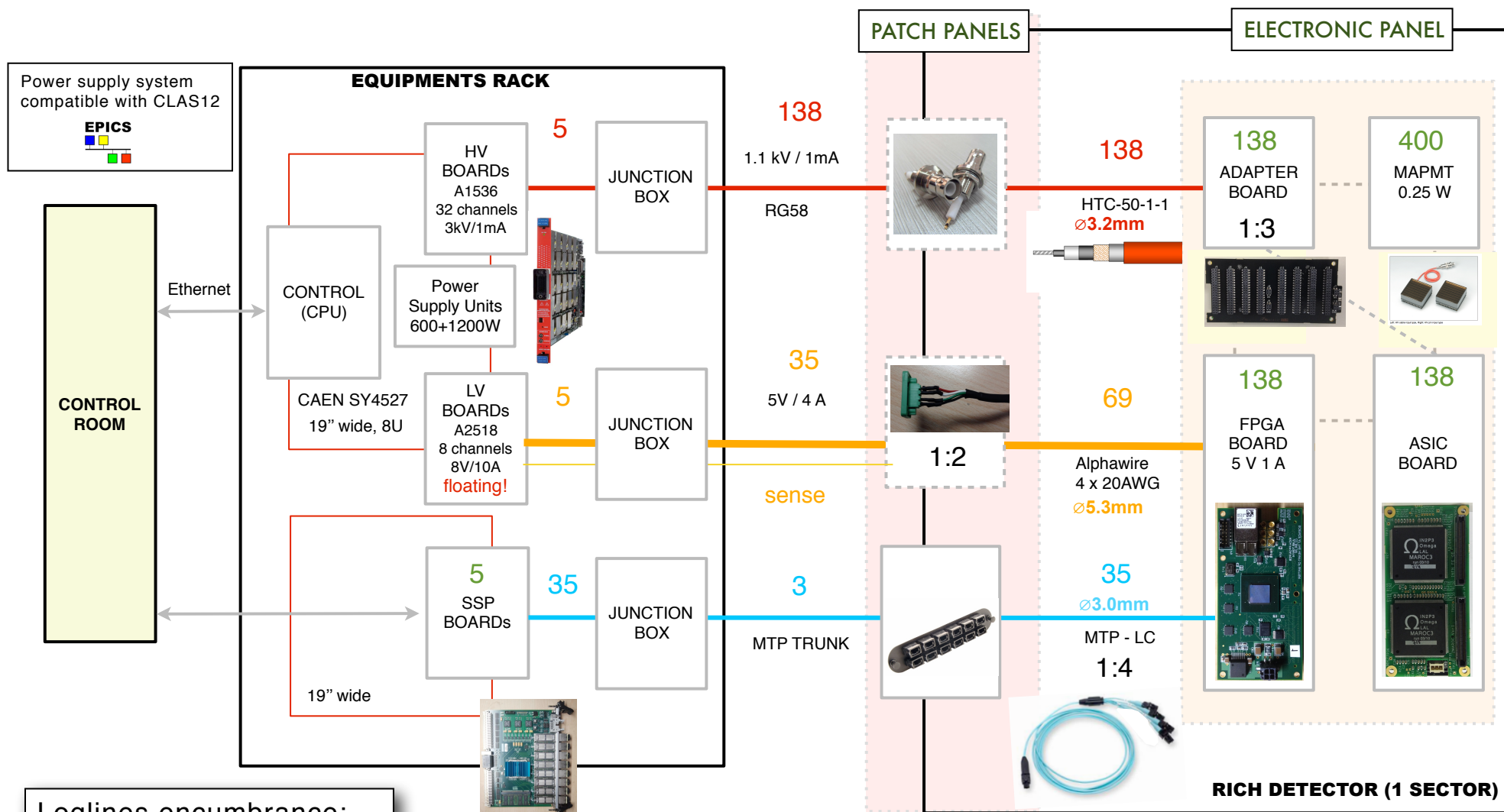
Loglines encumbrance:
High Voltage - 1413 mm²
Low Voltage - 1966 mm²
Optical Fiber - 324 mm²
TOTAL = 3704 mm²

to be estimated (~15 mt)

4 meters

Matteo Turisini - CLAS12 RICH - 2016 , July 21