

3He tubes

Institute	Model	Pressure	Volume	Size	HV	HV connector	No. Of Units		
GSI	LND-252248	10 atm	280 cm3	67.6cm x 2.54cm	1350-1550 V	SHV	10		
JINR	-	4 atm	353 cm3	50cm x 3cm	1400-1500	?	20		
ORNL	RS-P4-0824-222	10 atm	285 cm3	70cm x 2.54cm	900-1425 V	HN	17		
ORNL	RS-P4-1624-213	10 atm	1140 cm3	70cm x 5.08cm	1475-2000 V	HN	64		
RIKEN	SA-P4-0812-255	5 atm	140 cm3	40cm x 2.54cm	1250-1750 V	SHV	26		
UPC	LND-252248	8 atm	280 cm3	67.6cm x 2.54cm	1400-1650 V	SHV	42		
Total							179	Required Hybrid 148	Required Compact 166

Preamp distribution:

HYBRID CONFIGURATION

HV	GSI-UPC, RIKEN	1450 V	48 + 24	5 preamps	Option 1
	ORNL 1"	1350 V	16	1 preamp	
	ORNL 2"	1750 V	60	4 preamps	
	JINR	1450 V	18	ind preamp	

HV	GSI-UPC-ORNL1	1400 V	40 + 8 + 16	4 preamps-D	Option 2
	RIKEN	1450 V	24	2 preamp-U	
	ORNL 2	1750 V	60	4 preamps-U	
	JINR	1450 V	18	ind preamp	

Moderator Assembly

Moderator

Institute	Type	Size	No. Of Units
NPL	slabc	900x900x50 mm3	11
NPL	slabs	900x392x50 mm3	6
NPL	slabr	900x900x50 mm3	1
NPL	plug	392x138x50 mm3	6
NPL	plug_v2	240x114x50 mm3	4

Total

28

Required
28

Front Shielding

Institute	Type	Size	No. Of Units
NPL	slabr	900x900x50 mm3	4

Total

4

Required
4

Extra shielding

Institute	Type	Size	No. Of Units
ORNL	PE+Cd	724x305x26 mm3	9

Support table

Institute	Size	No. Of Units
RIKEN	1500x1550x1800 mm3	1

Total

1

Required
1

Front-end Electronics

Preamplifiers

Institute	Model	Input Connector	Output Connector	No. Of Units	No. Of Channels
IFIC	MESYTEC MPR-16-HV Unipolar	SHV	34-pin flat cable conn.	1	16
GSI	MESYTEC MPR-16-HV Differential	SHV	34-pin flat cable conn.	1	16
UPC	MESYTEC MPR-16-HV Differential	SHV	34-pin flat cable conn.	3	48
UTK	MESYTEC MPR-16-HV Unipolar	SHV	34-pin flat cable conn.	7	112
JINR	JINR	?	?	20	20

Total

32

212

**Required
166**

Differential-Unipolar Converter

Institute	Model	Input Connector	Output Connector	No. Of Units	No. Of Channels
UPC	JYFL prototype 16ch/16ch	34-pin flat cable conn.	Lemo-00	3	48
IFIC	JYFL prototype 16ch/16ch	34-pin flat cable conn.	Lemo-00	2	32

Total

5

80

**Required
64**

HV supply

Institute	Model	Connector	No. Of Units	No. Of Channels
GSI	ISEG NHQ203M	SHV	1	2
ORNL	ISEG MPOD	SHV	3	24
UPC	ISEG NHQ203M	SHV	2	4

Total

6

30

**Required
12 + 18**

Preamp power supply

Institute	Model	Connector	No. Of Units	No. Of Channels
IFIC	Mesytec MNV-4	SubD9	1	4
UPC	Mesytec MNV-4	SubD9	2	8
UTK	Mesytec MNV-4	SubD9	2	4
ORNL	MPOD?	SubD9	1	8

Total

6

24

**Required
12 + 18**

NIM Crates

Institute	Model	No. Of Units
RIKEN	?	2

Total

2

**Required
2**

Other electronics

Pulser system

Institute	Module	Model	No. Of Units
IFIC	Clock 10Hz	GSI	1
IFIC	D&G Gen.	Tennelec TC410	1
IFIC	Tail pulse generator	BNC BH-1	1
IFIC	Lear FI/FO	CAEN N625	1

Total

4

**Required
4**

Coverter power supply

Institute	Module	Model	No. Of Units
IFIC	+6V/-6V 1.5A Power Supply	PS2316	1

Total

1

**Required
1**

DACQ

Digitizers

Institute	Model	Input Connector	No. Of Units	No. Of Channels
GSI	Struck SIS3302 /8ch-100MHz	Lemo 00	2	16
IFIC	Struck SIS3302 /8ch-100MHz	Lemo 00	1	8
UPC	Struck SIS3302 /8ch-100MHz	Lemo 00	5	40
GSI	Struck SIS3316 /16ch-250MHz	Lemo 00	1	16
IFIC	Struck SIS3316 /16ch-250MHz	Lemo 00	7	112

Total

8 + 8

16

192

Required

166

148 + 8 CLOVER

VME Controller/PCI cards

Institute	Model	No. Of Units
IFIC	Struck SIS3100/1100	2
UPC	Struck SIS3104/1100	1

Total

3

Required

2

Clock distributor

Institute	Model	No. Of Units	No. Of Channels
UPC	Struck SIS3820	2	64

Total

1

64

Required

16

VME Crates

Institute	Model	No. Of Units
IFIC	Wiener UEP6021 1.5kW	1
RIKEN	?	1

Total

2

Required

2

PC computer

Institute	Model	No. Of Units
RIKEN	?	1

Total

1

Required

1

Cables

Tube HV		From preamp to tube			
Institute	Connectors	Cable type	Length	No. Of Units	
ORNL	HN-SHV	RG 223/U	180 cm	96	
UTK	SHV-SHV	RG 223/U	180 cm	75	
Total				171	Required 148

Preamp HV		From HV unit to preamp			
Institute	Connectors	Cable type	Length	No. Of Units	
ORNL	SHV-SHV	RG 59BU	350	6	
UPC	SHV-SHV	HTC-50-3-2	3 m	4	
IFIC	SHV-SHV	HTC-50-3-2	3 m	2	
JINR	no	?	?	20	
Total				12 + 20	Required 12 + 18

Flat-Cable/Coaxial Adapter for Preamp		From preamp to digitizer			
Institute	Connectors	Cable type	Length	No. Of Units	No. Of Channels
ORNL	34pinFCC-BNC	RG274	280cm	6	96
Total				6	96
					Required 84

Flat-Cable for Preamp		From preamp to Diff-Unip Converter			
Institute	Connectors	Cable type	Length	No. Of Units	No. Of Channels
GSI	34pinFCC	Flat cable	3 m	1	16
UPC	34pinFCC	Flat cable	3 m	3	48
Total				4	64
					Required 64

Coaxial cable coverter to digitizer					
Institute	Connectors	Cable type	Length	No. Of Units	
IFIC	Lemo 00-Lemo 00	RG174	2ns	64	
Total				64	Required 64

Conector converters for digitizers					
Institute	Connectors	Cable type	No. Of Units		
TRIUMF	BNC-Lemo 00 F/M	RG174	170		Required 102

SHV right-angle connector					
Institute	Connectors	No. Of Units			
MSU	SHV-SHV right-angle	15		Required 12	

CLOVER

Detector

Institute	Model	Crystal size	HV	Input Connector	Output Connector	No. Of Units	No. Of Channels	
ORNL	EXOGAM-1	50mm x 80mm	2000-3000 V	SHV	BNC	2	8	
					Total	2		Required 2

HV supply

Institute	Model	Connector	No. Of Units	No. Of Channels	
ORNL	ISEG MPOD	SHV	1	8	
			Total	8	Required 8