



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित
सैक्टर 81, नॉलेज सिटी, प° ओ° मनोली, एस° ए° एस° नगर, मोहाली, पंजाब 140306
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Human Resource Development, Govt. of India)
Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab
PAN No. - AAAAI1781K

• Phone : +91-172-2240086 & 2240121 • Fax : +91-172-2240124, 2240266 • <http://www.iisermohali.ac.in> • Email: stores@iisermohali.ac.in

IISERM (35-2)18/19 Pur

28th June 2018

Corrigendum-III

Refer IISER Mohali E-tender Ref. no. IISERM (35-2)18/19 Pur for **Supply and Installation of Cryogenic cables-35-2** at IISER Mohali, Sector-81, Knowledge City, PO-Manauli, SAS Nagar Mohali, Punjab. Due date for the online submission is extended as with **below mentioned Technical Details**.

Revised Date and Time

Sr.no.	Description	Extended Due date/Time
01	Closing Date & Time (Online)	09-07-2018 up to 11: 00 AM
02	Opening Date & Time of Technical Bid	10-07-2018 at 11:30 AM

All the other terms & conditions will remain same as contained in the NIT.

For any information, other modifications and/or corrigendum may kindly visit IISER Mohali websites <http://www.iisermohali.ac.in> & <https://eprocure.gov.in/eprocure/app>

Sd/-
Mukesh Kumar
Assistant Registrar (S&P)

Items Details:-

Sr. No.	Specification for Cryogenic cable	Quantity (in ft)																		
1)	<p>UT-085-SS-SS Semi-Rigid Coaxial Cable Material:- Outer Conductor 304-SS Diameter, inch (mm) 0.0865 +/- 0.001 (2.197 +/- 0.0254) Dielectric PTFE Diameter, inch (mm) 0.006 (1.676) Center Conductor 304-SS Diameter, inch (mm) 0.0201 +/- 0.0005 (0.511 +/- 0.0127) Electrical Properties:- Impedance, ohms 50 Frequency Range DC to 60GHz Capacitance, pF/ft. (pF/meter) 29.3 (96.1) Typical Insertion Loss</p> <table border="1" data-bbox="300 981 1217 1261"> <thead> <tr> <th>Frequency</th> <th>Insertion Loss, dB/ft. (dB/meter) at 20°C and Sea level</th> <th>Average Power Handling</th> </tr> </thead> <tbody> <tr> <td>0.5Ghz</td> <td>0.89 (2.92)</td> <td>52.4</td> </tr> <tr> <td>1.0Ghz</td> <td>1.26 (4.13)</td> <td>37</td> </tr> <tr> <td>5.0Ghz</td> <td>2.84 (9.32)</td> <td>16.4</td> </tr> <tr> <td>10.0Ghz</td> <td>4.04 (13.25)</td> <td>11.6</td> </tr> <tr> <td>20.0Ghz</td> <td>5.76 (18.90)</td> <td>8.1</td> </tr> </tbody> </table> <p>Corona Extinction Voltage, VRMS @ 60 Hz 1500(approx) Voltage Withstand, VRMS @ 60 Hz 5000(approx) Outer Conductor Integrity Temperature, °C 225 Maximum Operating Temperature, °C 200</p>	Frequency	Insertion Loss, dB/ft. (dB/meter) at 20°C and Sea level	Average Power Handling	0.5Ghz	0.89 (2.92)	52.4	1.0Ghz	1.26 (4.13)	37	5.0Ghz	2.84 (9.32)	16.4	10.0Ghz	4.04 (13.25)	11.6	20.0Ghz	5.76 (18.90)	8.1	15
Frequency	Insertion Loss, dB/ft. (dB/meter) at 20°C and Sea level	Average Power Handling																		
0.5Ghz	0.89 (2.92)	52.4																		
1.0Ghz	1.26 (4.13)	37																		
5.0Ghz	2.84 (9.32)	16.4																		
10.0Ghz	4.04 (13.25)	11.6																		
20.0Ghz	5.76 (18.90)	8.1																		
2)	<p>UT-34C Semi-Rigid Coaxial Cable Material:-Outer Conductor Copper Diameter, inch (mm) 0.034+/- 0.001 (0.864+/-0.0254) Dielectric PTFE Diameter, inch (mm) 0.025 (0.635) Center Conductor SPC Diameter, inch (mm) 0.0159+/- 0.0005 (0.404+/-0.0127) Electrical Properties:- Impedance, ohms 17+/-1.0 Frequency Range DC to 128GHz Capacitance, pF/ft. (pF/meter) 85.4 (280) Typical Insertion Loss</p>	10																		

Frequency	Insertion Loss, dB/ft. (dB/meter) at 20°C and Sea level	Average Power Handling
0.5Ghz	0.62 (2.03)	27
1.0Ghz	0.88 (2.88)	19
5.0Ghz	1.99 (6.52)	8.4
10.0Ghz	2.83 (9.30)	5.9
20.0Ghz	4.06 (13.31)	4.1

Corona Extinction Voltage, VRMS @ 60 Hz 200(approx)
Voltage Withstand, VRMS @ 60 Hz 500(approx)

Outer Conductor Integrity Temperature, °C 175
Maximum Operating Temperature, °C 150

3) Thermocoax cable **25**

Properties of the cable
Type 1NcAc
outer diameter d=0.5 mm
a central wire d1=0.17 mm diam made of NiCr (80/20)
a room temperature resistivity $\rho_1=1.08 \text{ m}$.
The surrounding jacket with an inner diameter d2=0.35 mm is made of stainless steel (type 304L).
The space between the conductors, of a thickness $(d2-d1)/2 = 90\mu\text{m}$, is filled with highly compacted mineral powder (MgO) and its leakage at low temperature is negligibly small.

Frequency	attenuation dB/m
10Mhz	10
100Mhz	20
20Ghz	50