

SHORT TENDER CALL NOTICE

No. 843 //Estt., Dated. the 29/02/2020

Sealed short tenders is invited from intending bonafide Authorized firms/ agencies for the supply & Installation and integration of Local Area Network( LAN) of networking items for different sections of Mayurbhanj Collectorate, Baripada.

Last date for submission of Tender Paper - 12.03.2020 2.00 PM

Date and time of opening of Tender - 12.03.2020 4.00 PM

The interested Suppliers/Authorized firms/agencies should submit their quotation in sealed envelope. All the pages of the tender papers should be signed with deal of the firms/agencies.

The sealed envelop containing the proposals must be dropped in the assigned box kept in the office of the ADM(G), Mayurbhanj during the office hour. Any quotation received after date line shall liable for rejection.

Photocopy of valid pan card, GSTIN registration certificate, up-to-date Income Tax Clearance certificate from the competent authority upto 31.03.2020 should be furnished along with the tender papers.

The transportation cost of required items to be procured shall be borne by the Supplier.

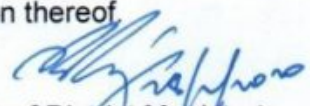
Interested bidders must submit their quotation in the prescribed format and sealed with cover y superscripting Tender for Supply and Installation and integration of LAN in Mayurbhanj Collectorate to the office of the ADM, Mayurbhanj latest by 12.03.2020 2.00 PM.

The items should be supply, installation and integration of LAN within the date line.

The payment will be made by the Collector only after satisfactory supply, installation and integration of the LAN in Collectorate on submission of documents like suppliers invoice, Warranty certificate etc.

Any legal dispute arises out of this is subject to jurisdiction of Baripada only.


Quotation document having detailed specification, terms and condition can be downloaded from the website <https://mayurbhanj.nic.in/>. The undersigned reserve the right to cancel or reject any bid without assigning any reason thereof.

  
Collector & District Magistrate,  
Mayurbhanj

Memo No. 844 /Dt. 29/2/2020

Copy to the Project Director, DRDA, Mayurbhanj/All Sub-Collectors/ P.A, ITDAs/Tahasildars/BDOs/All District Level officers of Mayurbhanj /DIO, NIC Mayurbhanj for information and necessary action. They are requested to display the Short Tender Call Notice in their Notice Board for wide publicity.

Copy to Notice Board of Collectorate, Mayurbhanj to display for wide publicity.

  
Collector & District Magistrate,  
Mayurbhanj

### QUOTATION FORM

1.	Name of Bidder	
2.	Name & Designation of Authorized Signatory	
3.	Registered Office Address	
4.	Type of Firm	
5.	Telephone Number & Mobile	
6.	Email Address	
7.	Service Tax Number of the Firm	
8.	PAN Number of the Firm	
9.	ITR of Firm for the last three years (proof enclosed)	
10.	Details of EMD of Rs.10,000/- pledge in favour of Collector, Mayurbhanj	

I / We agree to abide by all the conditions mentioned in this quotation Document issued by the Authority and also the further condition of the said quotation Notice given in the attached sheets (all the pages of which have been signed by us in token of  
Acceptance of the terms mentioned there in).

Signature of the bidder:  
Name and Address:



**EQUIPMENTS PRICE BID FOR NETWORKING  
PART - A (UTP COPER CABLE NETWORKING)**

SL. NO.	DESCRIPTION	QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE	TOTAL PRICE
1	24 Port 10/100/1000 mbps Network switch SFP PORT	6	Nos		
3	Cat-6 Utp Cable 305 mtr box (as per requirement)	15	Nos		
4	I/O jack with single faceplate and back box (as per requirement)	110	Nos		
6	CT-6 24 port loaded patch panel	6	Nos		
7	1 mtr Patch Cord (as per requirement)	119	Nos		
8	2 mtr Patch Cord (as per requirement)	110	Nos		
9	Copper UTP cable laying through PVC Conduit (as per requirement)	4575	Mtr		
10	IO fixing (as per requirement)	110	Nos		
11	Patch panel fixing	6	No		
12	9 U Rack Fixing with all accessories	3	Nos		
13	UPS Power Supply to Network equipments	3	Nos		

**PART - B (FIBRE CABLE NETWORKING)**

1	SFP Module	2	Nos		
2	6 Core arm Fiber SM cable	400	Mtr		
3	Pigtail	12	Nos		
4	6 Port LIU	2	Nos		
5	SC-LC Patch Cord	2	Nos		
1	Digging with HDPE Pipe	140	Mtr		
2	6 Core Fiber Cable laying	400	Mtr		
3	Road Cutting with GI pipe	12	Mtr		
4	Splicing	12	Core		
5	LIU fixing	2	Nos		



## **Quotation for Supply and Installation and Integration of Local Area Network (LAN)**

### **Terms & Conditions :**

Unit Price must be mentioned in INR Inclusive of all taxes and transportation for delivery & installation on site.

1. The vendor/suppliers should be an authorized partner and must provide valid GST and PAN Number (photocopy **to be enclosed with Signature, date and seal**). The Vendor/supplier should be ISO-9001 and other better quality certified organization having experience of executing LAN/WAN orders in Odisha during last 3 years with at least 3 orders of minimum 10-20 lacs. Annual Turnover of the vendor/supplier should be minimum 1 Cr per year during last 3 years.
2. The supplier should have the ink signed original authorization certificate specific to this tender from the respective OEM along with their bid.
3. We will prefer to buy the solution from experienced OEM who are having local office/Service Centre in Odisha. **PO** (Purchase Order) copies from Govt./Judicial Institutions should be attached in support of the claims.
4. The first time installation has to be done by OEM engineer at our site. Bidders are requested to quote for best effort advance replacement during Warranty period directly from OEM.
5. The price quoted should remain firm a period of minimum 3 months from the due date of bid submission. The materials must supply and install within 15 days of issue of Purchase Order.
6. Transportation will be at Suppliers scope.
7. The price offer through E-mail/Fax will neither be accepted nor entertained. Incomplete offer or communication after due day and time will be rejected.
8. The price offer/envelope must be properly sealed, stamped & duly signed by the authorized person of the firm/agency and the firm should mention "**Quotation Call for supply and installation of integration of Local Area Network (LAN)**" On the top of the envelope and should be written full address with phone number in the sender's side of the envelope.
9. 90% payment will be released after successful delivery, installation and testing of the complete solution and 10% will be released after 3 months successful running of the products.
10. **The agency/firm must sign on each page of the quotation document as published in the website as well as other relevant documents with seal & date and to be submitted.**
11. Collector reserves the right to accept or reject any bid and cancel the order without any liability in case the materials are not supplied within the stipulated period and/or non-fulfillment of contractual obligation.
12. Delivery/ installation of the store should strictly be completed within the stipulated period of delivery.
13. The material must be properly packed against any damage and insured for transit except where hand delivery is proposed.
14. The vendor shall provide an installation completed certificate after completion of the installation of LAN in the Collectorate.
15. All Network equipments like L2 managed switches must be IPV6 ready from day1 along with supporting VLAN.
16. Price should be inclusive of all taxes.



<b>TECHNICAL SPECIFICATION(PART - A (UTP COPPER CABLE NETWORKING)</b>		
<b>24 port 10/100/1000 mbps Network switch Qty-6</b>		
Parameter	Description	Compliances
Form Factor	19" Rack Mountable. Rack mounting kit to be provided	
Physical Dimensions	To be specified by the vendor (WxDxH)441 x 198 x 44 mm	
Architecture	Non Blocking	
Ports	24 Port 10/100/1000 Copper port + 4 Fiber SFP ports	
GBIC/SFP	supports 4 No's 1000 Base mini GBIC/SFP trans receivers LC connector for connecting single mode fiber(LX)	
Port Status	Display Each port must have a dedicated LED status display.	
MAC Addresses	Supports Up to 8K MAC addresses	
Switching capacity and forwarding rate	At least 56 Gbps Packet throughput 8 Mbps or more	
VLANs Supported	Support for up to 4096 VLANs simultaneously Port-based and 802.1Q tag-based VLANs MAC-based VLAN	
Management	Web Management	
	Port mirroring	
	RMON, SNMP V1, V2, V3	
L2 Loop Protection	IEEE 802.1d Spanning tree protocol 802.1s RSTP(Rapid spanning Tree Protocol)	
	IEEE 802.1W MSTP(Multiple Spanning Tree Protocol)	
Link Aggregation	Support for IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
	• Up to 8 groups	
	• Up to 8 ports per group with 16 candidate ports for each (dynamic) 802.3ad link aggregation	
QOS Support	802.1p Priority Queues per Port.	
IPv6	Switch should have IPv6 Ready	
Port mirroring /span Port	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to 8 source ports can be mirrored to one destination port. A single session is supported.	
TFTP or FTP Support	For Configuration file backup and restore.	
Port Security	The ability to lock Source MAC addresses to ports, and limits the number of learned MAC addresses.	



Access Control	supports standard and extended ACLS. Should support various types of ACLS like port based/time based.	
Power	AC Input 100-240V AC. Power Cable as per Indian Standards to be Provided	
<b>Cat-6 Utp Cable 305 mtr box QTY-15</b>		
The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed.		
This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801		
Nominal Outer Diameter of Cable should be 5.9+/-0.01mm and Conductor Diameter 0.56 mm (23 AWG)		
Construction: 4 twisted pairs separated by internal PE Cross Separator. Full separator. Half shall not be accepted. Rip Cord is must.		
Conductor Solid bare Copper and Outer jacket sheath FRPVC/LSZH and UL approved CM rated cable. Jacket color: Light Grey		
Insulation :High Density Polyethylene Solid		
Dielectric Strength of cable should be 1000 V RMS		
Bending Radius : < 4X Cable Diameter at -20°C +/- 1°C		
Pulling Force: 25.35 LBS		
Electrical Parameters Pair – to – pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR.		
Insertion Loss of 32.8 db/100m at 250 MHz		
Cable should support operating Temperature from -20° to +70°C		
Cable support Conductor Resistance < 9.38 Ω /100m		
Mutual Capacitance of cable should be < 5.6nF/100m		
Max Resistance Unbalance of cable should be 5% Max		
Capacitance Unbalance of cable should max 330pF/100m		
Cable support Delay Skew: < 45nS, Operating Voltage: 72V NVP: 69% and Current Rating : MAX 1.5A		
Printed sequential Length Counter of each meter on Outer Jacket		
Category 6 UTP cables shall Supports Gigabit Ethernet (1000 base-T) standard and Operates at bandwidth of 250MHz		
<b>CAT-6 24 port loaded patch panel QTY-6</b>		
The Cat-6 transmission performance is in compliance and Exceeds ANSI/TIA/EIA-568-C.2 Standard. Supports 1000-Base-T.		
90 Degree (Top Entry) Punch Down Design for Convenient Network Terminations.		
Ease of Installation with built in Rear Cable Management.		
Removable Module Design		
6x4 Module Specially Designed Jack Configuration		
PCB: FR4, 1.6mm Thickness 2 Layers		



Jack Wire: Square wire Phosphor Bronze with 30 $\mu$ " Gold Over Nickel Plating.	
Fully (360 degree covered) 30 microns Gold plated Contact pins, for better for POE Application	
IDC Conductor : 0.5 mm Phosphor Bronze, Tin Plating	
Contact Compatibility : 22~26 AWG Stranded and Solid Wires	
1U Patch Panel to Mount In any Standard Rack. Panel Frame : SPCC Powder Coating In Matt Finish Black Color.	
Housing : High Impact Flame Retardant Plastic, UL 94V-0 Rated	
Easy Port Labeling Identification Provision	
Higher flexibility of square pins used here instead of the single side Gold Plated stamped pins	
No oxidization of Contact pins due to absence of soldering flux leading to longer life	
Current Rating : 1.5amps	
Insulation Resistance : $\geq 500\text{m}\Omega$	
Contact Resistance : $\leq 10\text{m}\Omega$	
DC Resistance : $\leq 0.1\Omega$	
DC/AC Volt Endurance : DC 1000V/AC 750V 1 Min	
Plug Insertion Life : $\geq 750$ Cycles with FCC Compliant RJ-45 Plug	
Plug & Jack Contact : $\geq 100$ Grams with FCC Compliant RJ-45 Plug Force	
Plug Retention Force : $\geq 11$ LBF	
Durability : 200 Termination Cycles	
Operating Temperature : -10 Degree ~ 60 Degree	
Operating Humidity : 10% ~ 90% RH	
Storage Temperature : -40 Degree ~ 68 Degree	
ANSI/TIA-568-C.2	
Qualified Class E / Cat.6 Permanent Link & Channel	
ISO/IEC 11801:2002/AMMD.2:2010	
YD/T 926.3-2009	
ISO/IEC 60603-7 Compliant	
RoHS Directive 2002/95/EC/Compliant	
UL Listed, ETL Verified	



<b>1 Mtr Patch Cord- QTY 119 &amp; 2 Mtr Patch Cord QTY-107</b>	
Category 6 UTP Patch Cords should be Factory Tested for Better Quality and Suitable for the High Speed Data Transmission.	
Complies with the ANSI/TIA/EIA-568-C.2 Standard. Supports Data Networks Speeds Up to 10/100-Base-T and 1000-Base-T	
Should be LSZH Jacket for Reduced Toxic Gasses Emitted During Combustion	
RJ45, 8P8C, 2 FORK 50 $\mu$ " Gold Plated Contacts	
Patch cords should be 100% Factory Tested	
Transparent Boot Cable Assemblies	
Should be Available in Different Colors on request	
Conductor Material : Stranded Copper	
Conductor Diameter : (24 AWG)	
Insulation Material : HD-PE	
Insulation Thickness : Min at any point: 0.18mm MAX AVG:0.20mm	
Min at any point: 0.17mm MAX AVG:0.19mm	
Insulation Diameter : 0.94 $\pm$ 0.01mm/0.92 $\pm$ 0.01mm	
Cross Filler : Transparent 4.2 $\times$ 0.35	
Jacket Type : LSZH (Low Smoke Zero Halogen)	
Jacket Thickness : Min at any point: 0.51mm MAX AVG: 0.55mm	
Jacket Width : Min at any point: 5.2mm MAX AVG:5.8mm	
Plug : 50 $\mu$ " Gold Plated Contact	
Boot : Transparent	
Standard : ANSI EIA/TIA 568-C.2	
<b>I/O jack with single faceplate and back box Qty-107</b>	
Category 6 Keystone is Punch Down Type 30 Micron Gold Plating Suitable For 23~24 AWG Stranded and Solid Wire.	
Compliant to T568A and T568B Wiring Schemes	
Small & Exquisite form factor	
Skilled Design on Jack and PCB. Ergonomic Design and Easy Termination	
Collapsible Shutter Type Option	
Keystone Jack Can Be Easily Terminated by Hand Tool	
Backward compatible with both RJ11/RJ12 Plug	
Housing : High impact flame retardant plastic, UL 94V-0 rated	
PCB : FR4, 1.6mm Thickness	
Jack Wire : Phosphor bronze gold over nickel plating	
Nickel Plating Base(Ni) : 40 $\mu$ ~80 $\mu$	
Gold Plating : 50 microns	
Connector : Insulation displacement connector	
(IDC) Accept #23~24 AWG solid wire	
Current Rating : 1.5amps	
Insulation Resistance : 500 M $\Omega$ minimum	
Contact Resistance : 10 m $\Omega$ maximum	
DC Resistance : 0.1 $\Omega$ maximum	
Plug Insertion Life : 750 Cycles minimum	



Plug & Jack Contact Force :100 Grams minimum using FCC-approved plug	
Plug Retention Force : 30 lbs minimum	
Temperature : -40° to 150°F (-40° to 68°C)	
Qualified unscreened Class E/Cat.6	
Permanent Link & Channel ANSI/TIA-568-C.2	
IEC 60603-7-4 2nd Edition	
ISO/IEC 11801 2.2 Edition	
CENELEC EN 50173-1:2011	
Single Face Plate Square (86 x 86mm) x 12 mm	
Should support UTP and STP Jacks Cat5e, Cat6	
Should have Robust and installer friendly design Surface Mount Boxes for Face Plates	

<b>TECHNICAL SPECIFICATION PART - B (FIBRE CABLE NETWORKING)</b>	
<b>Description</b>	<b>Compliances</b>
<b>SM Fiber SFP Module Qty-2</b>	
Connector Type: LC	
Wavelength (nm): 1310	
Max Cable Distance: Upto 10 Kms	
<b>6 Core arm Fiber SM cable Qty -500 mtr</b>	
4F Unitube Armored with water blocking tape.	
Rodent Proof, UV Protection.	
Embedded Strength members as 2 steel wires od 1.0 mm.	
Polyester based yarns below Armor tape for easy ripping	
Thermoplastic Material Tube	
Excellent Water Proof Layer and Moisture Resistance	
Excellent Crush Resistance Performance	
Light Weight and Compact Structure	
The fiber type is a Matched Cladding Single Mode	
Extremely high bandwidth. Optimized to support transmission at 1310 nm,1550 nm. Virtually unlimited Modal Bandwidth at 1310 nm	
Should fulfill the requirements of:	
IEC 60793-1/60794-1.2	
ITU-T REC G.652D	
Telecordia GR-20 Core	
Testing methods are in accordance with the following standards:	
ITU-T G.652.D	
IEC 793-1	
Nominal mode field diameter	9.2 µm
Mode field diameter tolerance	±4 µm
Cladding diameter	125
Cladding diameter tolerance	±1 µm



Mode field concentricity error	< 1 $\mu$ m	
Cladding non-circularity	(= $\leq$ ) 1.0	
Change of Temperature increase, -60°C to+85°C	Attenuation <math>\leq 0.05 db/km	
Dry Heat at 85°C	Attenuation increase, 30 days <math>\leq 0.05 db/km	
Damp Heat increase, 30 days at 85°C/ 85%R.H.	Attenuation <math>\leq 0.05 db/km	
Damp Heat increase, 30 days at 85°C/ 85%R.H.	Attenuation <math>\leq 0.05 db/km	
CORE	Germanium doped core with no phosphorus i.e. reduced tendency for hydrogen degradation.	
COATING	UV-curable dual layer acrylate coating, which ensures excellent micro bending and abrasion resistance.	
Coating Strip Force (typical)		
Min.	1.3 N	
Max.	8.9 N	
Stripping force after ageing in water at 70 $\pm$ 5 °C for 168 h.		
Min.	1.0 N	
Max.	3.5 N	
Attenuation (of cable with fibers):		
At 1310 nm		
Atten. At 1383nm (OH-Peak)		
At 1550 nm		
Cut-off wavelength c:		
High limit	1330 nm	
Low limit	1180 nm	
Cut-off wavelength cc		
High limit	1260 nm	
Loss increase at 1550 nm for 100 turns of fiber loosely wound with a 37.5 mm radius:		
Max.	0.1 dB	
<b>Dispersion:</b>		
Zero dispersion wavelength	1310 nm	
Tolerance of zero dispersion		
Wavelength	-10/+12 nm	
Zero-dispersion slope: 1295<math>\leq\lambda_0\leq</math>1300		
Max.	$\leq$ 0.092 at $\lambda_0$	



Chromatic dispersion coefficient:	
In 1285 nm - 1330 nm interval:	
Max.	3.5ps/km • nm
In 1270 nm - 1340 nm interval	
Max.	6 ps/km • nm
At 1550 nm	
Max.	18 ps/km • nm
Polarisation Mode Dispersion (PMD):	
Max.	<=0.2 ps/km
In homogeneity of OTDR trace for any two 1000 meter fiber lengths	
Max.	0.1 dB/km
Proof test level	1%

**6 port Loaded LIU qty-2**

Min. 6 Port Configuration Available in Standard 19"	
6/12/24 Ports Adapter Interface available from day one without any adapter plates.	
Consist of Top Cover and Bottom Panel	
Easy to Assemble and Disassemble	
Three Types of Input Holes	
Cable Entry Through Water Proof Cable Clamp	
Splice Max 24 Fibers at Most with 1 Tray	
Patch Cord with Bend Radius Guides Minimize Macro Bending	
Install 6 Cable Management Rings Inside to Ensure Flexibility	
Comprehensive Accessory Kits for Cable Entry and Fiber Management	
Dimensions (mm) : 430 X 220 X 1U	
Body Material : SPCC Black Powder Coating	
Features	SC/LC/FC adaptors should be Simplex and duplex type.
	Telcordia GR-326-Core.
	RoHS Compliance
	Low Insertion and Return Loss
Insertion Loss	Adapters should have compact design & high precision
	Telcordia, TIA/EIA, IEC compliance
	<= 0.20 db for Zirconia Sleeve
Sleeve/Ferrule Withdrawal Force	Durability (1000 Matings): <= 0.2db
	Main Body Material : PBT/ABS
SC / FC Adapter 2.0N ~ 5.9N , LC Adapter-1.0N ~ 2.5N	

**Pigtail Qty-12**



LSZH Jacket-Reduced Toxic Gasses Emitted During Combustion	
100% Factory Tested	
Low Insertion Loss and Return Loss	
Available with Corning Fiber	
Available in PC/APC Type Options	
High Precision Ceramic Ferrule with Good Concentricity	
SC/LC/FC options	
Connector Type : SC, ST, FC, LC, MTRJ	
Fiber Type : OS2	
(9/125 Corning Clear Curve)	
Tight Buffer Color : White/yellow	
Tight Buffer Material : LSZH	
Tight Buffer Diameter (mm) : 0.9 +/- 0.05	
Strength Member : Aramid Yarn	
Jacket Color : Yellow for OS1/OS2	
Jacket Material : LSZH	
Jacket Thickness (mm) : 0.45 +/- 0.05	
Cable Diameter (mm) : 2.9(+/-0.1) X 5.9(+/-0.2)	
Cable Weight (kg/km) : Approx. 13.0	
Minimum Bending : 30 (static) Radius (mm)	
Attenuation (db/km) : <= 1.5 at 1300nm, <= 3.5mm at 850nm	
Short Term Tensile (n) : 160	
Crush Resistance (n/100mm) : 500	
Operation Temperature : Minus 20 ~ Plus 70 (degree)	
Insertion Loss : <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db	
Return Loss : PC>= 45db, UPC>=50db, APC>=60db	
Connector Ferrule : Ceramic, (MTRJ: PS Polyphenylene Sulphide)	
Apex Offset : <50µm	
Fiber Height : (+/-)100nm	
End Face Radius of Curvature : 7mm <R<25mm(Excluding MTRJ)	
Repeatibility : <= 0.2db 1000 Times Mating Cycles	
Working Temperature : (minus 40 Degree ~ Plus 85 Degree)	
Storage Temperature : (minus 40 Degree ~ Plus 85 Degree)	

**SC-LC Patch cord Qty-2**

LSZH Jacket-Reduced Toxic Gasses Emitted During Combustion.	
Simplex and Duplex Options	
100% Factory Tested	
Low Insertion Loss and Return Loss	
Available with Corning Fiber	



Available in PC/APC Type Options	
High Precision Ceramic Ferrule with Good Concentricity	
SC/LC/FC options	
Connector Type : SC, ST, FC, LC, MTRJ	
Fiber Type : OS2 (9/125 Corning Clear Curve)	
Tight Buffer Color : White/yellow	
Tight Buffer Material : LSZH	
Tight Buffer Diameter (mm) : 0.9 +/- 0.05	
Strength Member : Aramid Yarn	
Jacket Color : Yellow	
Jacket Material : LSZH	
Jacket Thickness (mm) : 0.45 +/- 0.05	
Cable Diameter (mm) : 2.9(+/-0.1) X 5.9(+/-0.2)	
Cable Weight (kg/km) : Approx. 13.0	
Minimum Bending : 30 (static)	
Radius (mm)	
Attenuation (db/km) : <= 1.5 at 1300nm, <= 3.5mm at 850nm	
Short Term Tensile (n) : 160	
Crush Resistance (n/100mm) : 500	
Operation Temperature : Minus 20 ~ Plus 70	
(degree)	
Insertion Loss : <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db	
Return Loss : PC>= 45db, UPC>=50db, APC>=60db	
Connector Ferrule : Ceramic,	
(MTRJ: PS PolyphenyleneSulphide)	
Apex Offset : <50µm	
Fiber Height : (+/-)100nm	
End Face Radius of Curvature : 7mm <R<25mm(Excluding MTRJ)	
Repeatability : <= 0.2db 1000 Times Mating Cycles	