MURATA MACHINERY, LTD.

TEXTILE MACHINERY DIVISION

Green-Bldg, 2-6-26, Kitahama, Chuo-ku, Osaka, 541-0041, JAPAN TEL: +81-(0)6-6202-1385 FAX: +81-(0)6-6202-3096 https://www.muratec.net

INQUIRIES REGARDING OPERATIONS

MURATA MACHINERY, LTD. TEXTILE MACHINERY DIVISION TECHNICAL SERVICE DEPARTMENT 136, Takeda-Mukaishiro-cho, Fushimi-ku, Kyoto, 612-8686, JAPAN TEL: +81-(0)75-672-8230 FAX: +81-(0)75-672-8304

GLOBAL SALES & SERVICE NETWORK MURATA MACHINERY USA INC. MURATA MACHINERY (SHANGHAI) CO., LTD.

MURATA MACHINERY USA INC. 2120 Queen City Drive, P.O.Box 667609, Charlotte, N.C. 28208, U.S.A. TEL: +1-704-394-8331 FAX: +1-704-392-6541 https://www.muratec-usa.com

MURATA MACHINERY MEXICO S. DE R. L. DE C. V.

Durango 81 Int. 508, Colonia: Roma Norte., CP. 06700 Delegacion: Cuauhtemoc Ciudad de México, CDMX, MEXICO TEL: +52-(0)55-52073064

MURATA DO BRASIL, LTDA.

Estrada de Santa Isabel, 3383-KM 38,5, Itaquaquecetuba-SP, CEP 08599-000, BRASIL TEL: +55-(0)11-4648-6222 FAX: +55-(0)11-4648-6737

MURATA MACHINERY EUROPE GMBH Hanns-Martin-Schleyer-Strasse 3, D-47877, Willich, GERMANY

TEL: +49-(0)2154-914-0 FAX: +49-(0)2154-914-188

MURATA MACHINERY INDIA PRIVATE LTD. NEW DELHI OFFICE (REGISTERED OFFICE) 1010, Hemkunt Tower, 98, Nehru Place, New Delhi, 110019, INDIA TEL: +91-11-2628-0046/47 FAX: +91-11-2628-0048

MURATA MACHINERY INDIA PRIVATE LTD. MUMBAI OFFICE

Mumbai OFFICE Unit No.401, 4th Floor, Madhava Building, Bandra Kurla Complex, Bandra East, Mumbai, 400051, INDIA TEL: +91-22-2659-0275~77 FAX: +91-22-2659-0280

MURATA MACHINERY INDIA PRIVATE LTD. COIMBATORE OFFICE

7-A1/A2, Avinashi Road, Thottipalayam Pirivu, Civil Aerodrome(P.O) Coimbatore-641014, Tamilnadu, INDIA TEL: +91-422-450-4184/85 FAX: +91-422-450-4186

MURATA MACHINERY BANGLADESH LTD.

Paradise tower, 5th Floor, Plot# 11, Sector# 3, Uttara, Dhaka, Bangladesh TEL: +880-(0)2-48955001 FAX: +880-(0)2-48955002

MURATA (THAILAND) CO., LTD.

898/43-44 SV CITY TOWER 2, 25th Floor, Rama 3 Road Bangpongpang, Yannawa, Bangkok 10120, THAILAND TEL: +66-(0)2294-7734-40 FAX: +66-(0)2294-7732

PT.MURATA MACHINERY INDONESIA

Ruko Gyan Plaza D-4, Jl. Terusan Pasirkoja Blok 8, Bandung, 40222,INDONESIA TEL: +62-(0)22-604-6633 FAX: +62-(0)22-604-6612

MURATA MACHINERY VIETNAM CO., LTD.

58 Nguyen Quy Duc street, An Phu Ward, District 2, Ho Chi Minh City, VIETNAM TEL:+84-(0)28-6281-0601 FAX:+84-(0)28-6281-0860

MURATA MACHINERY VIETNAM CO., LTD. HA NOI BRANCH

193C Ba Trieu Street, Le Dai Hanh ward, Hai Ba Trung District, Ha Noi, VIETNAM.

INQUIRIES REGARDING PARTS

150 Xin Gao Rd., Qingpu Industrial Zone,

TEL: +86-(0)21-6921-2300 FAX: +86-(0)21-6921-2312

135 Fu Te Xi Yi Rd., Wai Gao Qiao Free Trade Zone,

Rm.309 Yu Lin Bldg., Xiang Jun Nan Li Er Xiang Jia No.5,

TEL: +86-(0)10-6597-8829 FAX: +86-(0)10-6591-1768

Room 1018, No.238 Chang Gang Zhong Rd., Haizhu-qu,

TEL: +86-(0)20-8434-2882 FAX: +86-(0)20-8434-3463

Room No. 1517, 15 Floor B block Yuguan Simpson Hotel

TEL: +86-(0)531-8510-8966 FAX: +86-(0)531-8510-8966

Room No.1105, Huafang International Building, No.178.

TEL: +86-(0)512-5879-5318 FAX: +86-(0)512-5879-5308

Room No. 702, 703, Fangzheng Bldg, No.63, Renmin Rd,

TEL: +86-(0)571-8272-2193 FAX: +86-(0)571-8272-2193

64 Hoi Yuen Road, Kwun Tong, Kowloon, Hong Kong

TEL: +886-(0)2-2558-3908 FAX: +886-(0)2-2558-3907

TEL: +82-(0)54-472-0127 FAX: +82-(0)54-472-0129

TEL: +852-2332-0009 FAX: +852-2780-6340

MURATA MACHINERY TAIWAN, LTD.

MURATA MACHINERY KOREA CO., LTD.

18F., No.17, Sec.1, Chengde Rd., Taipei 10351, TAIWAN

4F, 115, Indongbuk-gil, Gumi-si, Gyeongbuk, 39439, KOREA

Chengbei Road(M), Zhangjiagang 215600, CHINA

MURATA MACHINERY (SHANGHAI) CO., LTD.

Chengxiang Street Xiaoshan, Hangzhou, Zhejiang

MURATA MACHINERY (H.K.) LTD.

Unit 502, 5/F, Yen Sheng Centre,

MURATA MACHINERY (SHANGHAI) CO., LTD.

Chaoyang-qu, Beijing, 100020, CHINA

Shanghai, 201700, CHINA

Pudong, Shanghai, CHINA

BEIJING BRANCH

GUANGZHOU BRANCH

SHANDONG OFFICE

JIANGSU OFFICE

ZHEJIANG OFFICE

311202, CHINA

Guangzhou, 510250, CHINA

Jinan, Shandong 250011, CHINA

[Registry Add]

MURATA PARTS SALES, LTD. 136, Takeda-Mukaishiro-cho, Fushimi-ku, Kyoto, 612-8686, JAPAN TEL: +81-(0)75-672-8371 FAX: +81-(0)75-671-0789 https://www.muratec.net/tm/support

(LIAISON OPERATIONS)

MURATA MACHINERY, LTD. CAIRO LIAISON OFFICE APT 604, 6th Floor, 8, El Mansour Mohamed Street, Zamalek, Cairo, A.R.EGYPT TEL: +20-(0)2-7355168 FAX: +20-(0)2-7355168

MURATA MACHINERY, LTD. TURKEY LIAISON OFFICE Cavusoglu Mahallesi Cobanyildizi caddesi No:18, 34873, Kartal / Istanbul, TURKEY TEL: +90-(0)216-374-5698 FAX: +90-(0)216-374-0614

(AUTHORIZED SERVICE AGENCIES)

SPINTEX (PRIVATE) LTD. C-92, KDA Scheme No.1, Karachi, PAKISTAN TEL:+92-(0)21-34523729,34523739 FAX:+92-(0)21-34523727

M.B. DI MASSIMO BARBERIS Via Arduino Giuseppe 4, 13853 Lessona,(BI), ITALY TEL:+39-015-981903 Fax:+39-015-981903

ANTONIO LEITAO UNIPESSOAL LDA. Rua do Padrão Nº 356 4150-558 Porto, PORTUGAL TEL: +351-917-546-613

JOSE ALBERTO MUNUERA LOPEZ C/.Girona, 12 08339-VILASSAR DE DALT Barcelona, SPAIN TEL: +34-654-31-67-37

Muratec Smart Support

Visual Manager III V-LABO III

nuratec





MURATA MACHINERY, LTD.

Muratec Partners are Linked with Muratec Smart Support.

(7)

21

> 26 27

> > 28

29

> 35 36 37

> > 38

39

EASY ACCESS

You can access and review data and information provided by MSS from any location in a factory.

> In a wireless environment around the machines. MWE (Muratec Wireless Equipment) is sold separately.

EASY SOLUTION

Trouble points and problems can be extracted so that customers can take action and solve the problem on their own.

Report on analytical results A report on analytical results of medium and long term data is available.



EFFICIENT SUPPORT

Customers and Muratec staff share machine information by means of automatic collection, accumulation, and aggregation of operational data. When trouble occurs, you can receive accurate and speedy technical support.



MSS Web Applications

- Checking machine performance
- Extracting trouble points from machine data
- on a daily basis
- Creating an optimum periodic maintenance schedule • Solving machine trouble by the MSS Web Applications

	MSS/ Web Applications	
0	Performance Data	>
	Job List	142>
0	Troubleshooting	>
9	Alarm Code	>
0	Document	>
•	Parts Inquiry	>
*	Language	>
G+	Logout	



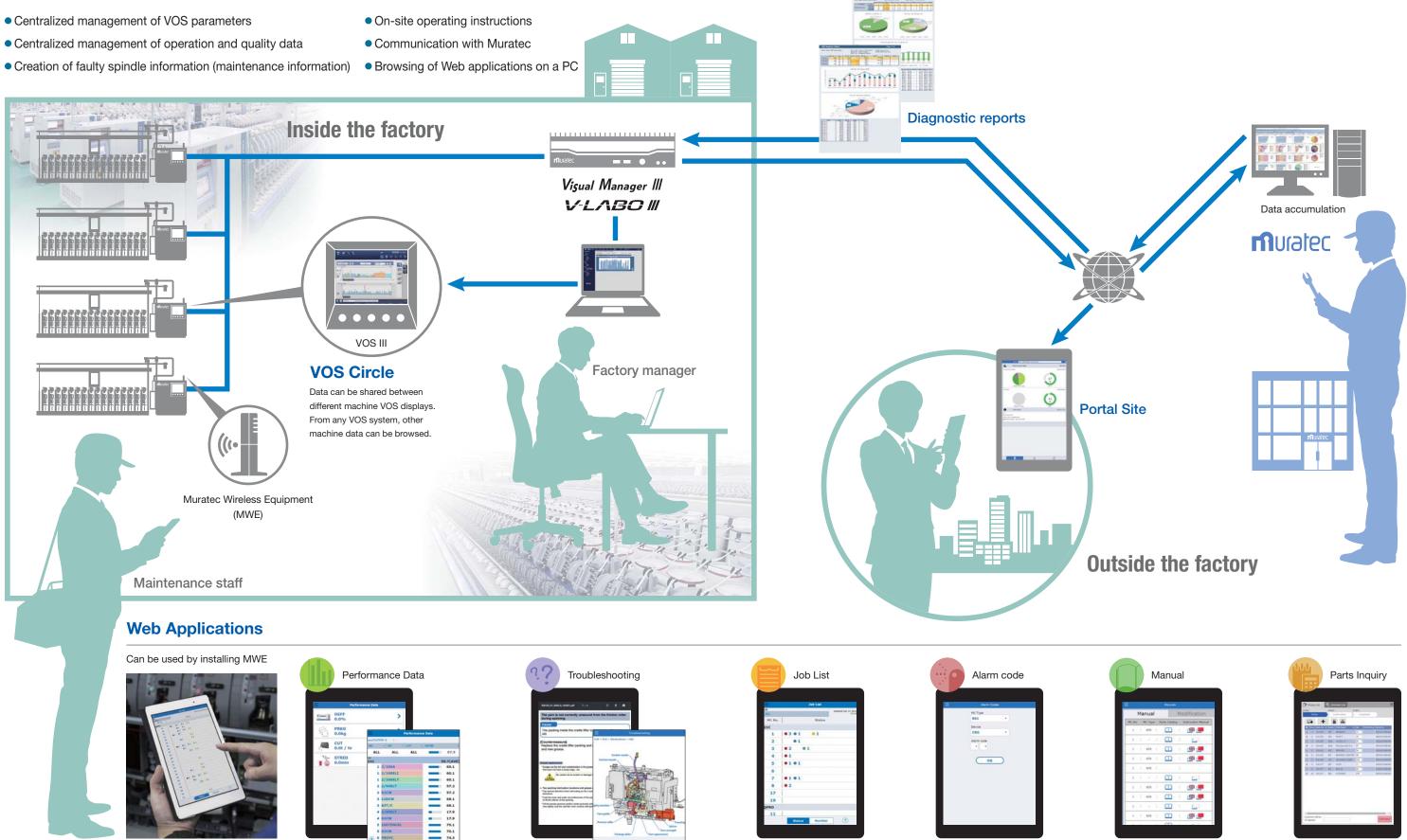
Muratec Head Office

Muratec Service location

Muratec Smart Support



Centralized system for collecting, analyzing, and storing data of multiple machines.



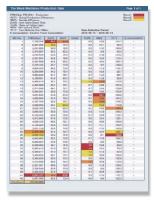
	Ma	anua					ال ::	3	F	Parts	; Ir
10		Periode					2 14	ala.		ener al B	
M	anual	Mo	dification				ting to	-		E	2000
HERE	962.7ypm (1.8)	ets Catalog 1	Indiazion Menad				- 63	+	1	6 4	
1 1	atu i	00 /	(B) (B)	1						-	
							1	214-101	. 89	and t	
1.1		<u> </u>	- Eur	4			1819	2440	-	104014	
1 1	820	<u> </u>	(S)				RIP	1 Distant	180	and the	
2 1	870	0	(P) 💭	1			*	Pi-42	- 24	Barrier (part	1.1
			PR. 72				* - 1	(PA.01	-	614	
1.1	870 1						1	214.217	1.00	RUCK -	4
2 1		<u> </u>	Gard				-				
1	870	<u>ш</u> і	(B) (B)								
_											
3.11	8/0	<u> </u>	(19) 🛃	1							
3.1		<u> </u>	Card I								
100	870		(B) 🛲				1.000	Min.			-
				- 1			10-100				

VM WEEKLY HEALTH

Report operation data machinewise and lotwise.

Weekly operation data of in-factory automatic winders is reported as divided into the following items.

- Production data
- Quality data
- Extract faulty machine and faulty spindle data
- MIS% : Mis-splicing Ratio
- YF/Y : No. of yarn defects per 100 km
- YEF% : CBF bobbin yarn end finding success rates
- DOF% : Auto doffer doffing success rates
- FBE% : CBF full bobbin discharge rates, CBF alarms









Production, AEF%, SEF%, MIS%

Production Data

Worst MIS% Spindle Information

Worst Alarm CBE Information

VM HEALTH ANALYSIS

Relative evaluation of factory's automatic winder performance.

A monthly summary of major operation data is reported.

Monthly operation status is reported as a relative evaluation among country users and worldwide users.



······································	
4	

Time Chart

Comments

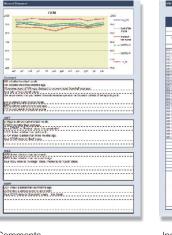
Index of Muratec Winder Level



VL HEALTH ANALYSIS

Outline of machine health management.

Monthly performance is validated by a score.





Comments

Index of VORTEX Machine Management

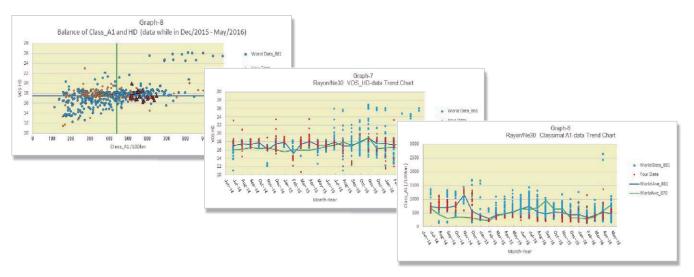
VL ADVANCED ANALYSIS

Relative quality index for VORTEX yarn.

VOS quality data is reported by compilation according to yarn types and yarn counts.

- Trend analysis of factory quality data for 1 year period.
- Trend analysis of world VORTEX quality data for 1 year period.
- Evaluation of factory data comparing the world trend.

Data Comparison with World VORTEX User (Rayon-Ne30)

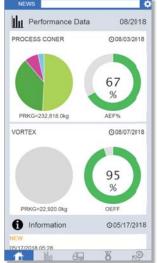


Time Chart

NEW MSS PORTAL *Options

Production volume & machine efficiency

Check your factory status using a tablet, smartphone, or other mobile device from anywhere in the world.



10	PRKG	
8		actories 687.0kg
	Cotton 55.28% 479,651.0kg	ye/Catton 26.10% 226,464.0kg
8	Polyester 53.50%	yon 5.13% 44,471.0kg
	Production q 1000 867,700	(ity (kg) duction: 867 687.2
8		19 22 25 28 11 (Date)

PROCESS CONER	PRKG(kg)	AEF
Osaka mill	4 228,115.0	60
Tokyo mill	4) 37,293.0	73.
Shanghai mill	151,112.0	73.
Jakarta mill	451,166.0	69

AFF LOT=ALL (Pictor 60 (4) 100 228.20 50 28.20 114,10 28.40 114,10 0 104 07 10 13 16 19 22 25 28.11 (Date)		Osa	aka mill		
28 • AI7: 61 • PRKC(kg) Accumulation value: 134.52 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	60	LO	T=ALL	2	(kg)
PRKG(kg) Accumulation value 134 52	50	14	-		14,10
		AEF: 61	Accumulation	value 13	14 52
	0 01 04	ALF: 61 PRKC(kg) 07 19 13 1	16 19 22 25	28 31 (Date)	14 52 73

Part shipping status verification

Allows for easy verification of the shipping status of parts without the need for troublesome inquiries.

rtsOrderHistor	ry
1 - 100 🔻	Search Q
OrderNO.	15ID1086
ShippingData	03/20/2017
TrackingNo.	DHL:423456794
	Updated Detail >
OrderDate	03/15/2017 - PurchaseParts
Supplier	Muratec Textile Unit-A9
OrderNO.	15ID1087
ShippingData	03/21/2017
TrackingNo.	DHL:423456795
	Updated Detail >
OrderDate	03/15/2017 - PurchaseParts
Supplier	Muratec Textile Unit-A10
DrderNO.	15ID1088
ShippingData	03/21/2017
rackingNo.	DHL:423456796
	Updated Detail >
	View more +10

Production status notifications

Allows for reception of emails which provide production status information at selected times.

生产量 NDOF No. of doffing 常珍个数 764 AEE(%) Actual production efficiency 实际生产率 75	96.0 R 4.0 kg 5.6 %
活動个数 AEF(%) Actual production efficiency 实际生产率 75 SEF(%) Spindle Efficiency 75	
实际生产率 SEF(%) Spindle Efficiency 75	.6 %
SEF(%) Spindle Efficiency 75	
40-1-XX++	5.7 %
MIS(%) Splicing error ratio 11 挖接失误比率 11	.5 %
YF/Y Average no. of yarn defect cuts/100km 纺线缺PG平均切头数/100km	6.7
LOWSP Low efficiency unit ratio (5% or less) 修动率单键率(5%以下)	.0 %
STOPSP Unit down time ratio 0. (%) 单锭厚止率 0.	.0 %

Ranking

Compares your company's factories to other Muratec users around the world and displays a ranking. This ranking can be used as an index for factory operation improvement initiatives.

	Ranking		
PROCESS CO Osaka mill Z		③ 08/07	/201
€ <u>Ne 21 - 40</u>	TOP50% - 75	× ×	
MIS%		5 TOP50% - 75%	1
UNIT ALARM%	🔹 Within 1.5%	TOP25% - 50%	4
Down Spindle%		O TOP1 🛛	
R	anking trai	BOTTOM	
08/01/2018 Total: 11.36			•
08012018 0802120		05/2018 08/2018 08/07/2	
	Ranking Re	ecord)	(1
		X	0

MWE & MSS Web Applications

MWE (Muratec Wireless Equipment)

Installing MWE allows for use of MSS Web Applications on tablets and smartphones on internal factory wireless networks.

Superior environmental performance dedicated to spinning factory

● Vibration resistance ● Cotton fly resistance ● Heat resistance ● Moisture resistance ● Corrosion resistance

MSS Web Applications

Performance Data OEFF O.0% PRKG	Perform
■ 0EFF >	Perform
0.0%	
PRKG	
0.0kg Performance Data	
CUT I=	
STRED ALL ALL ALL 67.5	
1 2/100A 60.1	
1 2/100ELI 60.1	
1 2/106ELT 60.1	
2 2/94ELT 57.2	
2 62CW 57.2	
3 120CW 68.1	
3 83T/C 68.1	
4 2/90ELT 17.9	
4 62CW 17.9	
5 100TENCEL 70.1	
5 62CW 70.1	

You can access and review all machine operational data even without operating a VOS.



0	Alarm code	
-	Alarm Codes	
-	HC Type 861 •	
	CRG •	
	Alarm code	
	ОК	

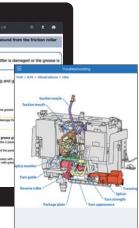
For alarms given on machine stands, solutions are proposed.



You can access and review instruction manuals that comply with each machine stand's specifications.



Troubleshooting





You can access and review faulty spindle information (maintenance information) extracted by the Visual Manager II /V-LABO II. Progress and completion of maintenance work are recorded.

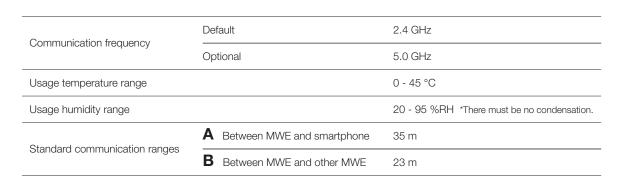


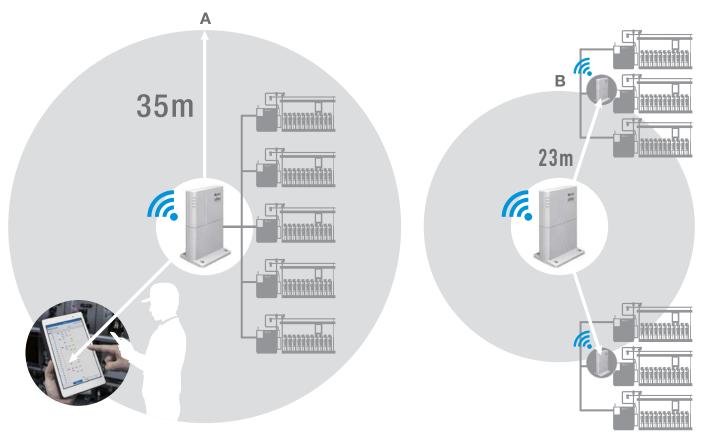
Part estimates required on-site are supported.

MWE wireless communication specifications

Factory Wiring Diagram

Muratec Wireless Equipment

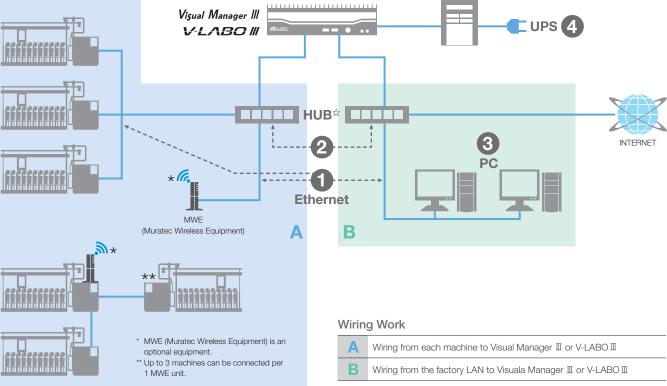




Options

-	FPRO series	QPRO series	21C	870 EX	870	861
Muratec Wireless Equipment (MWE) Machine network wireless connection/ use of MSS Web Applications inside the factory	•	•	•	٠	٠	•
MSS Portal Verification of production status from outside the factory	٠	•	•	٠	٠	٠

*QPRO series: QPRO, QPRO Plus, QPRO EX *FPRO series: FPRO, FPRO Plus, FPRO EX



Applicable Models

Visual Manager III	21C, QPRO, FPRO, QPRO Plus, FPRO Plus, QPRO
V-LABO	VORTEX 861, VORTEX II 870, VORTEX 870 EX

Supported OS & Browser

	OS	
PC	Windows Vista, 7, 8, 8.1, 10	Inter
Tablet / Smartphone	Android 4, 5, 6	

Necessary Equipment

1 Ethernet cable	Enhanced Category 5 - ST
2 HUB	Prepare HUBs in line with t Prepare another power sup HUB installation. Prepare HUBs correspond
3 PC	A PC connected to LAN is Visual Manager III or V-LAE No dedicated PC is require
4 Uninterruptible power supply system (UPS)	Visual Manager II or V-LAE Installation of an uninterrup

Α	Wiring from each machine to Visual Manager ${\rm I\!I}$ or V-LABO ${\rm I\!I}$
В	Wiring from the factory LAN to Visuala Manager ${\rm I\!I}$ or V-LABO ${\rm I\!I}$

m caution: Do not connect a cable from the machine and a cable from the factory LAN to the same HUB.

RO EX, FPRO EX

Browser

ernet Explorer 11

Chrome

STP (Shield Twisted Pair) or more

the number of connected machines.

upply at a HUB installation site because it is separately required for

iding to STP (Shield Twisted Pair).

is required to access data in Visual Manager II or V-LABO II.

BO II can be used with PC in which Internet Explorer is installed. red.

BO II may experience problems with even a momentary power outage.

uptible power supply system (UPS) is highly recommended.