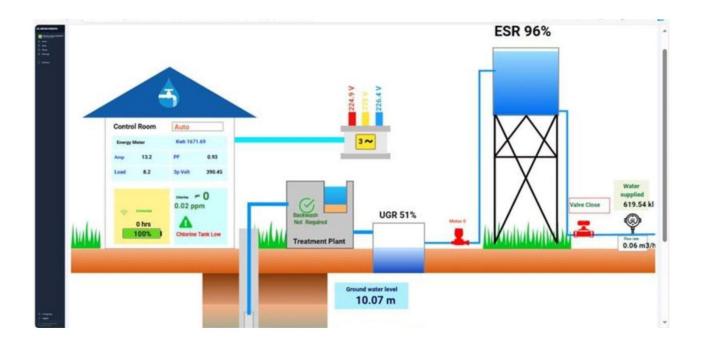


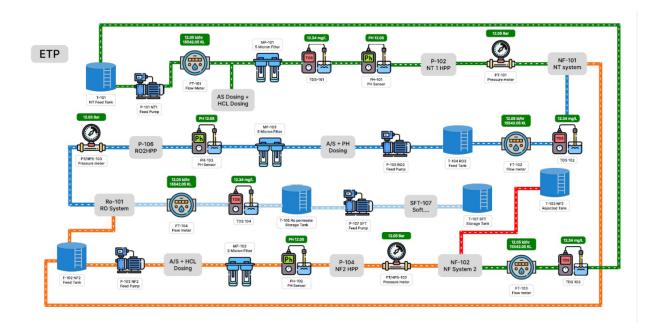




# SMART IOT AND AI based WATER Quality MANAGEMENT







Vision - Fast Forwarding The World's Transition To Sustainable & Connected Infrastructure

### **COMPANY PROFILE**

Name: A & A Corporation

**Area:** Our innovation is a next-generation Industry 4.0 IoT edge device /gateway branded as Manjeera IOT and dashboard manjeera.io used for remote data control equipped with device management and analytics. The device is Industry and communication agnostic (5G, 4G, WIFI, Lora, NbIoT, Satellite) and can work along with all kinds of sensors, meters, devices, Valve etc.

**Founded by:** IIT Bombay Alumni Member **Experience in IOT and water industries** – 10 years.









### Previous and present awards INNOVATION AWARDS

- UN Industrial Development Organization (UNIDO) Industrial IoT Innovation (2021)
- Top 34 global innovations (Japanese Government) (2019)
- Top 15 Global Innovations GMIS2019, Russia (United Nations, Russian Government & UAE Government) (2019)
- 2023 Selected for Global Entrepreneur Programme (GEP) DIT UK.

#### START-UP RECOGNITION

- Globally among top 10 hardware start-ups (Hong Kong Trade Show by start-up Launchpad)
   (2019)
- Top 20 Energy startups (by Startup Istanbul) (2017)

#### **COMPETITIVE WINS**

- 33 under 33 International Clean Energy Challenge winners Founders (Ashutosh Kumar Austria(2019)
- Top 8 for GetInTheRing (Berlin, Germany) 2019.
- Top 9 teams across complete Asia Pacific in the Power & Energy Sector (by Schneider Electric)
   Singapore(2018)

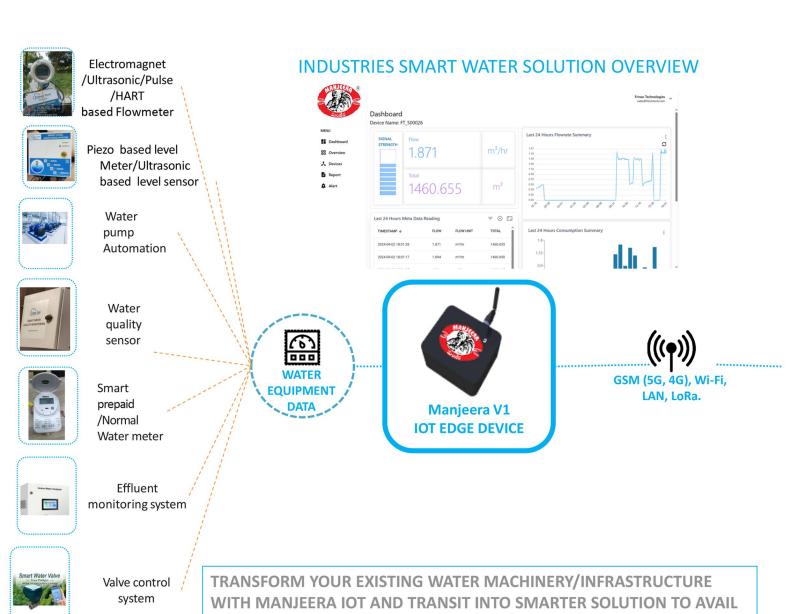
#### INDIAN GOVERNMENT SUPPORT

- 2024 Smart prepaid water meter AMRUT 2.0 Awardee phase 2 Ministry of Housing & Urban Affairs
- 2023 Smart meter hackathon winner Economically Viable Smart Meters Challenge
- 2022 Smart water management AMRUT 2.0 phase 1 Awardee Ministry of Housing & Urban Affairs
- 2022 and 2023 Awarded by Ministry of tele communication under digital communication innovation square initiative(DCIS 2022 and DCIS 2023)
- 2022 CII 23rd National Award for Excellence in Energy Management The Confederation of Indian Industry
- 2022 & 2021 Runners up Smart Communication Module for national smart meter program by Intellismart EESL Government of India
- 2022 & 2021 Smart Energy Management award by NASSCOM (2021)

# Why Digitize Water Infrastructure?

- Reduce Non Revenue Water (NRW)
- Regulatory body integration:
   CGWA,SGWA,CPCB,SPCB,JJM and Amrut 2.0
- Optimize wastage caused due to leakages, overflows and pilferages
- Provide continuous supply all the zones.
- Ensure quality of water supplied and discharged
- Accountability and equitable distribution
- Reducing the pump downtimes and inefficiency
- Automation of manual operations





TO REAL TIME INSIGHTS RESULTING IN INCREASED PROFITABILITY

- Can measure flowrate, totalizer, level, Ph, conductivity, valve control, and water billing
- Remote monitoring/Control
- Web portal or mobile app
- Alert at your fingertips

- Monitoring water data from single dashboard
- Alert over SMS AND Email to perform on time repair
- Automatic report
  generation to ease your
  submission of water
  report to regulator (
  CPCB, CGWA, SPCB)
- Leverage Our API integration with regulator, that provide electronic data interchange (EDI) for automated compliance reporting

### LIST OF PRODUCT OFFERING

#### **BUILT IN CONNECTIVITY**

Gain visibility and control into hard to wire locations with built in **GSM** (4G & 5G), **LAN LoRa**,Wi-Fi





#### **STORAGE**

On-device storage for mission critical data to ensure data continuity and integrity in the case of network outages



Easy to integrate with existing
Device via any common
industrial protocol: Modbus
RTU,TCP, **DLMS**, Serial, MQTT,
PLC and SCADA





### SCADA AND GOVERNMENT BASED CLOUD COMPATIBLE

All kind of GOVERNMENT SCADA AND WEB BASED CLOUD COMPATIBLE



Analog and digital I/Os for direct monitoring and control







#### **COMPACT DEVICE**

Dimensions of the device allows its use in limited space and difficult environmental conditions.

#### Real Time SOFTWARE DASHBOARD/SACADA OVERVIEW

manjeera.io – IoT Dashboard

#### **Device Management**

Provision, monitor and control IoT entities in secure way using rich server-side APIs. Define relations between your devices, assets, customers or any other entities.





#### **Dashboard White labelling**

Option to customers to custom white label their brand as well as the Domain name for marketing visibility.

#### **Collect and visualize data**

Collect and store telemetry data in scalable and fault-tolerant way. Visualize data with built-in or custom widgets and flexible dashboards.

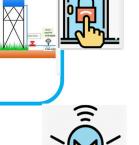
SCADA AND GOVERNMENT BASED CLOUD COMPATIBLE

All kind of GOVERNMENT SCADA AND WEB BASED CLOUD COMPATIBLE



Dashboard





#### **Access Controls**

Dashboard Access Hierarchy can be set based on the client needs for secure & controlled Login with all available cloud services.

#### **AI - Process and React**

Define data processing rule chains. Transform and normalize device data. Raise alarms on incoming telemetry events, attribute updates, device inactivity and user actions.

### Manjeera Water flow meter for Monitoring and Analysis

- Regulatory body integration : CGWA,SGWA,CPCB,SPCB,JJM and Amrut 2.0
- Monitoring and trends of flow rate and flow totalizer
- Monitoring inlet and outlet of STP, WTP, ETP ,Borewell, corporate building and factory.
- Monitoring of water supplied different zones/areas/processes
- Electromagnetic, Ultrasonic, Mechanical meters having Modbus, HART, 4-20mA, Pulse output
- Performing water balance
- Automated metering



### Manjeera Water Level Monitoring Solution

- Regulatory body integration:
   CGWA,SGWA,CPCB,SPCB,JJM and Amrut 2.0
- Monitoring and trends of level sensor
- Monitoring level of r open reservoirs, lake, river, waste water infra in order to avoid, STP, WTP, ETP, Borewell, corporate building, factor, open reservoirs, lake, river, waste water infra in order to avoid
- To remotely monitor the level in the storage tanks( over head and under ground) or open reservoirs, lake, river, waste water infra in order to avoid overflow and optimize pump operations
- Digitizing hydrostatic pressure based or Ultrasonic sensors having Modbus RS 485, 4-20mA





### Manjeera IOT based Pump and Valve Monitoring and Automation

- Complete Automation of all kind of JJM, Amrut 2.0 project
- · Integration with all kind of PLC and central Scada system
- Monitoring of pump energy consumption, dry run protection, over voltage and over current protection.
- Monitoring of vibration and temperature levels for predictive Maintenance
- Monitoring of pump protection, VFD and tripping
- Remote Pump and valve control and automation as per time based schedule, pressure or overhead tank level
- Automation and monitoring of all kind of Solar water pump, submersible water pump and surface water pump
- Automation and monitoring of all kind of valve Butterfly valve, controlled valve, solenoid valve, and gated valve.



# Manjeera Water Quality Monitoring solution

- Regulatory body integration : CPCB,SPCB,CGWA,SGWA,JJM and Amrut 2.0
- Quality Monitoring of STP, WTP, ETP ,Borewell, corporate building , factor, open reservoirs, lake, river, waste water infra
- Tracking water quality sensors and analyzers measuring Chlorine, PH, TDS, BOD, COD, TSS, pH and Temperature, Total Dissolved Solids (TDS), Turbidity, Ammonia (NH3-N), Total Nitrogen, Phosphates, Heavy Metals (Lead, Mercury, Arsenic, etc.), Microbiological analysis (Total Coliform, E. coli) at water treatment plants, STP, WTP, ETP, Borewell, corporate building, factor, open reservoirs, lake, river, waste water infra



# Manjeera Smart water meter for municipal corporation, smart city JJM and amrut 2.0 PROJECTS

- Government project : Municipal Cooptation ,JJM and Amrut 2.0
- Battery based smart water meter
- Smart Prepaid water meter
- Gain visibility and control into hard to wire locations with built in GSM (4G & 5G) and LoRa Network
- Automatic Valve control based on volume and time
- Battery operated and power-grid
- Integrated prepaid recharge platform and Supported all kind of digital payment mode
- AMR based Ultrasonic, electromagnetic and pulse based ( Mechanical) water meter available.
- AMR SYSTEM
- AMR software
- METER READING DEVICE
- Central water information management system





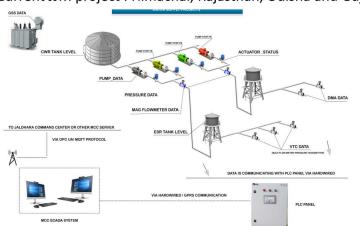


### LIST OF PROJECT OFFERING

### JJM - JAL JEEVAN MISSION PROJECTS

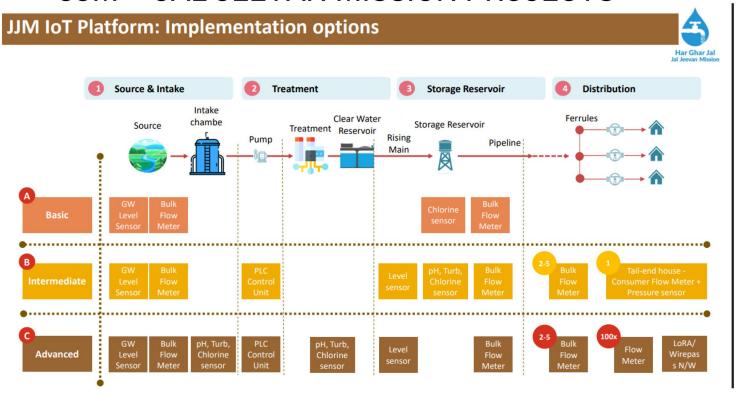
- Complete Automation solution of JJM project
- We will provide Study, Survey, Investigation, Assessment, Design validation and Revamping of entire Water Supply System including WATER QUALITY monitoring, Water Audit, Non Revenue Water reduction, SCADA, Bill reading and generation, Operation and Maintenance of the system
- Manjeera can detailed study and analysis of the present intermediate water supply system and will provide the
  effective solution to convert it in to 24x7 equitable water distribution system with adequate pressure, with
  considerable reduction in leakages and non-revenue water, SCADA system, O&M and to ensure complete
  satisfaction of the consumer.

Current JJM project: Himachal, Rajasthan, Odisha and Gujarat.

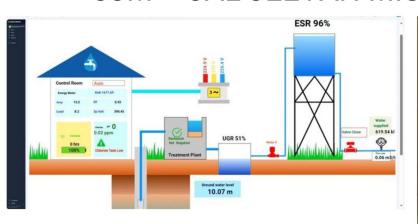




### JJM - JAL JEEVAN MISSION PROJECTS



### JJM - JAL JEEVAN MISSION PROJECTS









#### AMRUT 2.0/Smart city PROJECTS

Project name - Smart prepaid water meter, Municipal corporation – Mira bhyanadar Program - Amrut 2.0 Ministry - Ministry of Housing affairs GOI



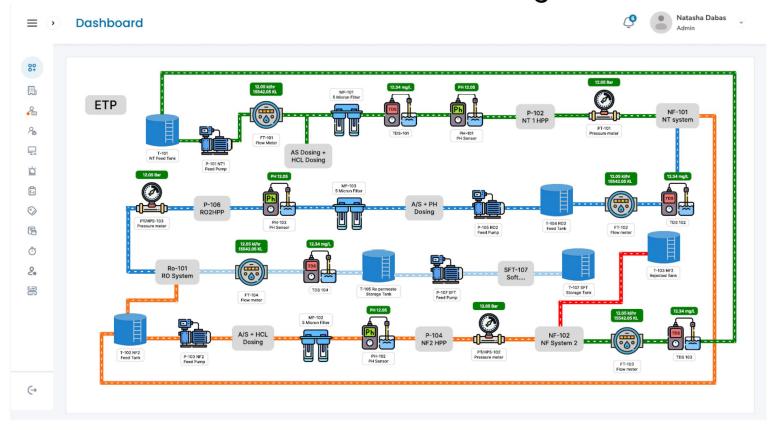


- Can measure flowrate, totalizer, etc.
- **Automatic valve control** based on time and based on volume
- Remote monitoring/Control
- Web portal or mobile app
- Alert at your finger tips



- **Real time Insights**
- **Smart decision making**
- **Quick actionable**
- Improves resource efficiency
- **Curbs losses**

### STP/ETP/WTP monitoring



### STP/ETP/WTP monitoring

- Input (Raw Sewage) Parameters:
  - o pH
  - o Biological Oxygen Demand (BOD)
  - Chemical Oxygen Demand (COD)
  - o Total Suspended Solids (TSS)
  - Total Dissolved Solids (TDS)
  - Turbidity
  - Temperature
  - o Ammonia (NH3-N)
  - o Total Nitrogen
  - Phosphates
  - o Heavy Metals (Lead, Mercury, Arsenic, etc.)
- **Water Quantity Monitoring**

Ultrasonic/ Electromagnetic Flow Meters for accurate real-time data

 Volume Tracking & Storage Monitoring (to measure capacity utilization and avoid overflow)

- Output (Treated Water) Parameters:
  - o pH
  - BOD (should be reduced significantly)
  - 。 COD
  - o TSS
  - o TDS
  - o Microbiological analysis (Total Coliform, E. coli)
  - o Turbidity
  - Dissolved Oxygen (DO)
  - Nitrate & Phosphate levels
  - Residual chlorine (if disinfection is applied)

#### **Energy Consumption Monitoring**

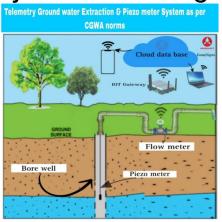
- Total Power Consumption (kWh)
- Power Consumption per KL of Water Processed
- Load & Performance Metrics for Pumps, Aerators, UV Treatment, etc.

#### STP/ETP/WTP monitoring

- □ STP monitoring for Pune Municipals Corporation
- □ STP/ETP monitoring for various Cooperate clients across india
- WTP monitoring for various cooperate client across india

### CGWA/CPCB project monitoring

- 10000++ device and meter ( Electromagnetic flowmeter and piezo meter) deployed on borewell
- Regulatory body integration : CGWA,SGWA,CPCB,SPCB
- 500++ water quality analyzer deployed









### Water quality monitoring projects

- □ Regulatory body integration : CPCB,SPCB,CGWA,SGWA,JJM and Amrut 2.0
- □ Quality Monitoring of STP, WTP, ETP ,Borewell, corporate building , factor, open reservoirs, lake, river, waste water infra

Current Project – Lake water Quality Monitoring monitoring in Bangalore, Smart Water quality monitoring System for Reservoir with IIIT Hyderabad, Smart Water quality monitoring System for river with IIIT Hyderabad.

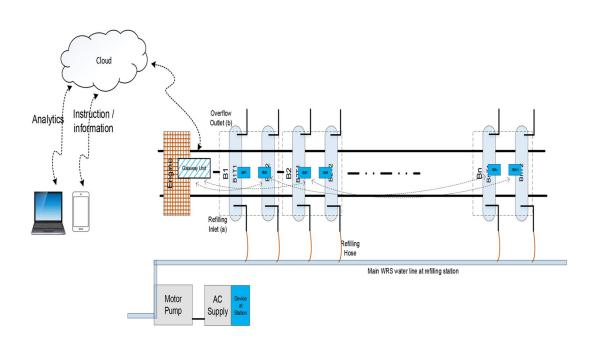
- □ ETP/STP Water quality analyzer monitoring with various government body, Corporate body and msme such as pune municipal corporation
- □ JJM project in various state
- WTP monitoring in various clients corporate and governments

## Water Management projects for corporate and residential building

- Current Project AWFIS, KALPATRU, DLF, ETC
- •Real-Time Monitoring: Manjeera IoT sensors track water usage, flow rates, and leak detection in real time, helping facility managers make informed decisions and respond quickly to anomalies.
- •Leak Detection and Prevention: Manjeera Smart water meters and pressure sensors detect leaks or irregular usage early, reducing water wastage and preventing damage to infrastructure.
- •Automated Control Systems: Manjeera IoT-enabled valves and pumps can automatically regulate water distribution based on demand, optimizing usage across different zones in the building.
- •Data Analytics & Reporting: Manjeera IoT platforms provide dashboards and insights into water consumption patterns, helping corporations set and achieve sustainability goals.
- •Integration with Building Management Systems (BMS): Seamless integration with existing BMS allows for centralized control and automation of water-related utilities, increasing operational efficiency.

### **Advanced Water Level Monitoring System on Trains**

The **Advanced Water Level Monitoring System** is designed to enhance water management on Indian trains, ensuring efficient usage, timely refilling, and improved passenger convenience. Below are the key features:



- 1. Real-Time Water Level Monitoring
- 2. Smart Alerts & Notifications
- 3. Remote Access & Cloud-Based Dashboard
- 4. Leak Detection & Water Wastage Prevention
- 5. Automated & Optimized Refilling

- 6. Energy-Efficient & Low Maintenance
- 7. AI & Data Analytics for Predictive Maintenance
- 8. Integration with Smart Railway Systems
- 9. Supports Passenger Hygiene & Comfort
- 10. Scalable & Customizable for Different Train Types

### **⚠** Safety Considerations

- For safe operation, read the instruction manual or user manual that comes with the product carefully or consult the distributor from which you purchased the product, before using the product.
- Products introduced in this catalog have not been designed or manufactured for such applications in a system or equipment that will affect human bodies or lives.
- Customers, who want to use the products introduced in this catalog for special systems or devices such as for atomic-energy control, aerospace use, medical use, passenger vehicle, and traffic control, are requested to consult the Hakko Overseas Sales Section.
- Customers are requested to prepare safety measures when they apply the products introduced in this catalog to such systems or facilities that will affect human lives or cause severe damage to property if the products become faulty.
- For safe operation, wiring should be conducted only by qualified engineers who have sufficient technical knowledge about electrical work or wiring.

#### Notes to consider before purchasing

- Appearance and specifications are subject to modification without prior notice due to technical improvements.
- Colors in the catalog may differ from the actual colors due to printing inaccuracies.
- Consult your distributor or us for further information about products in this catalog.

tributor	



### Innovating Energy Technology

### **SOFT MONITOUCH**

### Manjeera Scada and Manjeera- Server

### Bringing the factory floor to your desk



Product specifications and design are subject to modificatio Combined images are used for the screen images.

Product colors may differ from colors in brochure photos due to printing.

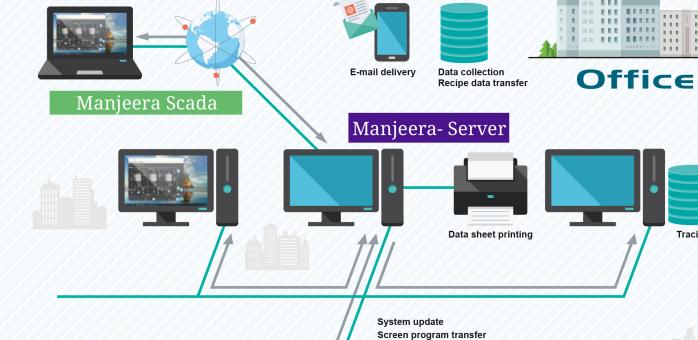
Windows and Excel are trademarks of Microsoft (USA) in the U.S. and other countries.

Other company and product names in this brochure are registered trademarks.

Manjeera Scada and Manjeera- Server links MONITOUCH in a factory with a PC in the office, so that you

can remotelly collect on-site data or monitor and control the equipment in the factory.

This combination enables efficient and low-cost production; immediate and appropriate responses to the condition of the production line is possible from anywhere.



### Manjeera- Server

### P.4 **Collection and saving of current data**

Linkage of a PC and MONITOUCH via Ethernet enables collection and saving of on-site data in real time.





P.7

### Manjeera- Remote

**Remote monitoring and control** 

### P.6

Installation of the Manjeera Scada and Manjeera-Server Software Package allows your PC to monitor and control the production site via MONITOUCH through Ethernet.

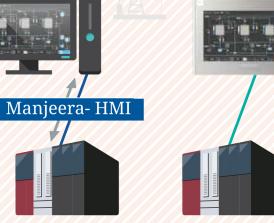
### Manjeera- HMI

### **MONITOUCH functions available on your PC/iPad**

Equivalent functions of MONITOUCH are available on your PC or iPad by directly connecting to PLC after installing Manjeera software. It is possible to show a screen image on a large PC display and link various Windows applications. By using on iPad, the control panel becomes portable.















Reading/ writing data in the storage





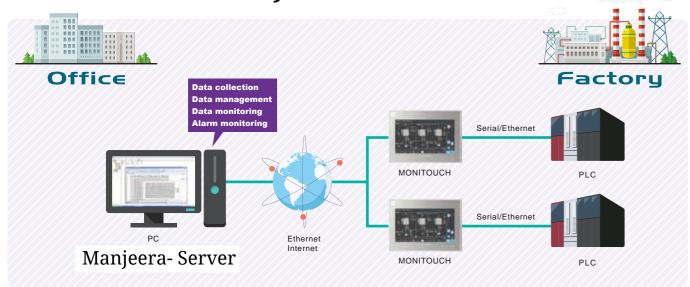


Sub-network



Linking your office and factory for collection of production data

Manjeera- Server



#### **Data saving without** programming



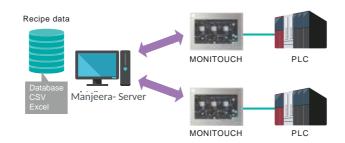
Production data can be regularly read out and saved in database or CSV/ Excel format.

#### Readout of sampling data

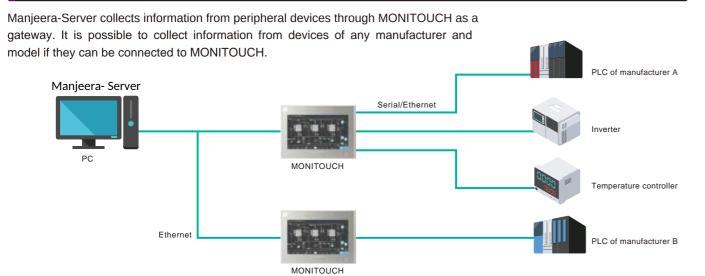
Sampling data stored in MONITOUCH can be read out and saved in database or CSV/ Excel format.

#### Consolidated recipe data management

Consolidation of recipe data by the host PC reduces the process of recipe registration and modification for each equipment and provides consistent production control.

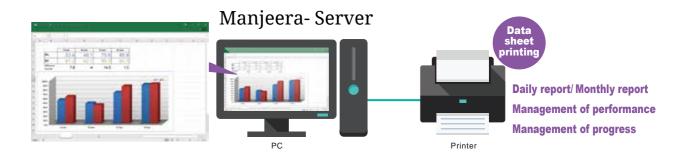


#### Consolidated data management for PLCs from various manufacturers and models



#### Easy to make daily and monthly reports (DDE function)

The tag data registered in Manjeera-Server can be pasted to Excel spreadsheet in DDE format. This makes it easy to generate daily/monthly reports.



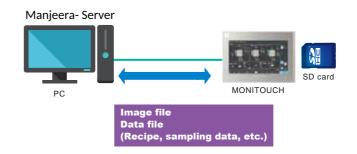
#### Quick response to on-site problems

Alarm data can be monitored to display historical data or a list of alarms currently occurring. In addition, an e-mail alert can be sent immediately when a critical alarm occurs.



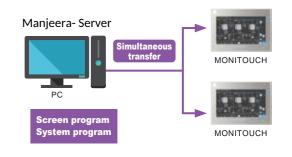
#### Reading and writing of stored data

Files on a SD card inserted in MONITOUCH can be read out to a PC, and files edited on a PC can be written onto a SD card via Ethernet.



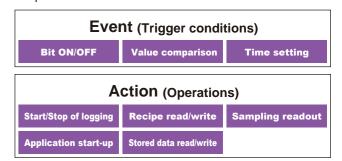
#### **Updating of MONITOUCH data from** the office

You can update the system program of multiple MONITOUCH panels at a time or transfer the screen program to them all together.



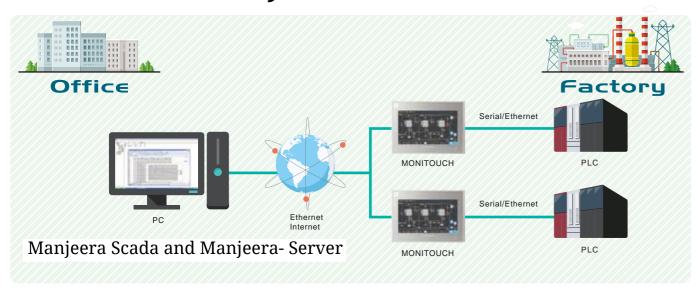
#### Automatic actions in response to events

Various kinds of events can be set depending on the requirements of the operation. Events allow for a high degree of flexibility, so you can adapt to the specifications of the production line.

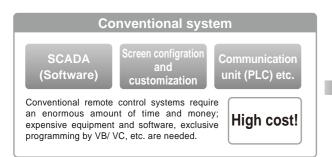


5

### Remote monitoring and control Manjeera Remote



#### Remote control with excellent cost performance



#### Monitoring and control of multiple units by one PC

Manjeera allows you to control and monitor multiple MONITOUCH panels with a single PC, which helps improve the operating efficiency and the cost-effectiveness.



#### Manjeera Scada and Manjeera-Server Manjeera Scada and **MONITOUCH** Manjeera-Server Only installation of low-cost application software is needed. The same screen program as for \_ow cost! MONITOUCH in production site can be used

#### **Security functions against** operation errors

without making any additional screen program

Security functions such as write-protect are provided to ensure safe and secure system operation.

for remote monitoring.



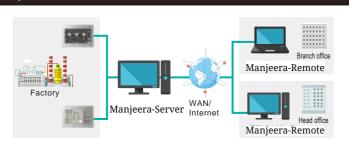
#### Remote control by means of a simple system

The system is compatible with various systems such as in-house LAN, Internet, WAN, etc.

O You can access the on-site screen via the Internet from a remote location.

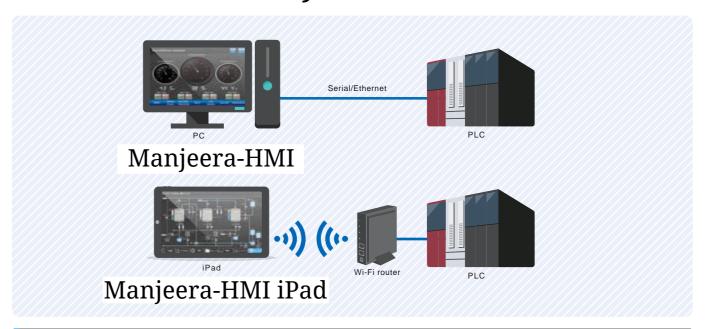
O You can monitor overseas plants via WAN.

\*It is necessary to modify the setting of firewall and routing for Internet access.



### Realizing even higher performance with MONITOUCH by integrating PC/iPad into systems

### Manjeera-HMI



#### Install anywhere, even on your palm

#### Manjeera-HMI iPad

It enables new applications like controlling multiple machines with a single tablet or wirelessly operating a machine while visually monitoring where best.



#### Easy selection of peripheral equipment

#### Manjeera-HMI

It is possible to connect peripheral equipment such as printers and mass storage media that have Windows drivers so that the data can be easily output or saved.



#### Large expandability combined with various applications

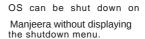
Manjeera-HMI

7

Processing of production data such as summary and analysis can be easily conducted using external software.









Start-up of application



including that for viewing a PDF of the troubleshooting manual.

DLL functions that were made individually can be loaded and executed on MANJEERA.

Loading and

**Advantages of using Manjeera Server** 

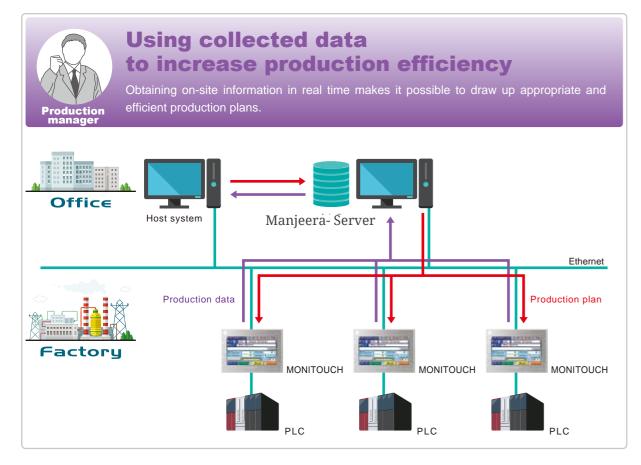
# "I don't have to bother collecting data any more."



#### Real-time collection of on-site production data

Production data can be collected in real time without distracting workers.

Collected data can be used for reviewing production plans and improving production facilities.







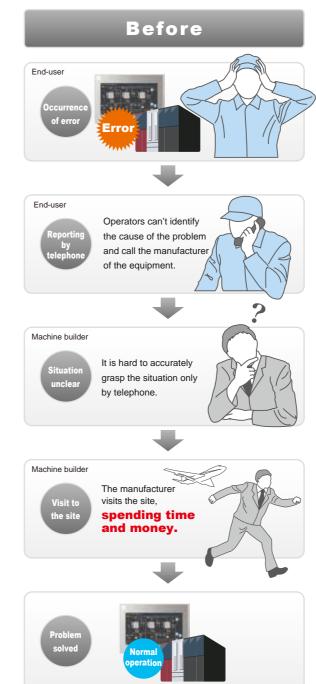
### **Advantages of using Manjeera Remote**

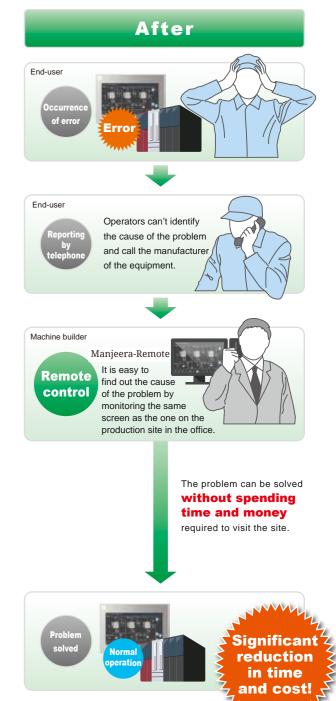
### "We can shorten the downtime."



#### Troubleshooting in the office for quick recovery

Prompt response to problems is possible by controlling the production equipment remotely. Production efficiency is improved by shortening downtime, and there is no need to spend the time and money required to send a person to the production site.





8

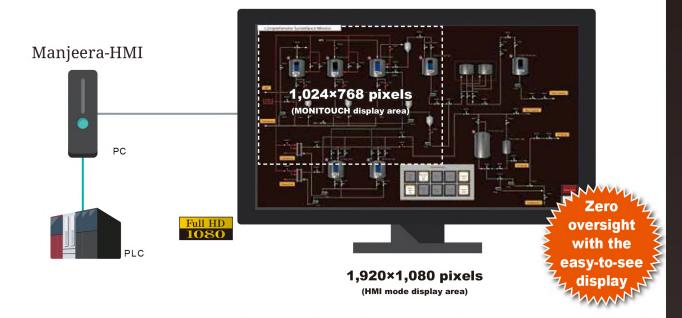
#### **Advantages of using Manjeera-HMI**

# "I won't miss a problem in production."



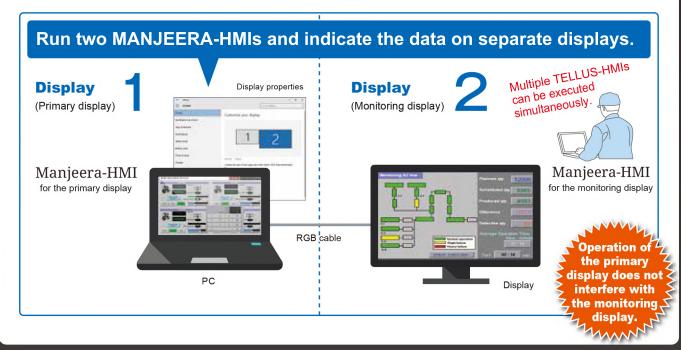
#### An image of the entire production line can be displayed on one large screen.

Equipping a PC with MONITOUCH functions makes it possible to have a large, full HD display. All operation processes can be displayed on one large screen.



#### Additional display only for monitoring is also available.

The dedicated MANJEERA screen only for monitoring can be displayed on a large display.



#### **Applicable Models & Operating Environment**

#### Applicable Models

/9 series	
S2000i series	
TS1000 Smart series	

#### Recommended Operating Environment (PC)

PC	IBM PC/ AT compatible with Windows
os	Windows 10 (32bit, 64bit)/ 8.1 (32bit, 64bit)/ 8 (32bit, 64bit)/ 7 (32bit, 64bit)/ Vista (32bit, 64bit)/ XP/XP64 Edition/ Server 2016/ Server 2012/ Server 2008 R2
CPU	Pentium IV 1GHz or more
Memory	256MB or more (When an emulator is used, 512 MB or more)
Hard disk	When Manjeera installed: 2.5 GB or more When Manjeera-Server installed: 2.5 GB or more
Display	Resolution: XGA 1024×768 or more Colors: High Color 16 bit or more

#### Configuration Software

V-SFT-6 Configuration software for MONITOUCH and MANJEERA.
You can easily create your own screen program as desired.

#### Recommended Operating Environment (iPad)

Model	System version
iPad	iPadOS13, iPadOS14

Resolution The iPad resolution differs depending on the model. Create the screen data at XG. (1024×768), then it becomes magnified on an iPad screen (same aspect ratio) automatically.

iPad model	Solution	Remarks
iPad Mini	2048×1536	iPad Mini 2 or later
iPad	2046×1536	iPad 3 or later
iPad Pro 10.5"	2224×1668	Incl. iPad Air 3
iPad Pro 11"	2388×1668	
iPad Pro 12.9"	2732×2048	

#### License Types

One license is required for each device. There are five types of licenses for different uses. (License framed in red is equivalent to one license.)

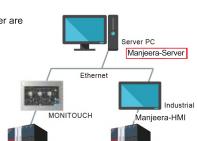
### Manjeera-Server

The functions of Manjeera-Server are carried out by the server PC.

Readout/ writing of the recipe data for MONITOUCH

- (or Manjeera HMI)

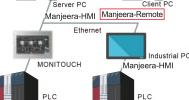
  ●Alarm monitoring
- ●Event action
- Screen data transfer (excluding Manjeera HMI)



### Manjeera-Remote

- A client PC equipped with Manjeera accesses Manjeera-Server on a server PC via Ethernet and operates the screens of MONITOUCH (or Manjeera HMI) remotely.

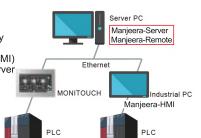
  HMI communication is
- HMI communication also possible.



#### **3** Manjeera Scada and Manjeera-Server

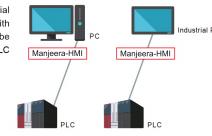
● A server PC equipped with Manjeera Scada and Manjeera-Server can remotely control the screens of MONITOUCH (or Manjeera HMI) while conducting Manjera-Server functions

HMI communication is also possible.



### 4 Manjeera-HMI

A PC (or Industrial PC) equipped with Manjeera-HMI can be connected with a PLC like MONITOUCH.



### **5** Manjeera-HMI iPad

iPad performs communications equivalent to the Manjeera series\* by connecting to a PLC wirelessly.
 \* Only models capable of Ethernet (TCP/IP) communication can connect.



#### License Validation

There are two types of licenses: Password type and USB license type.

### USB license key Manieera-HMI USB Key



Manjeera-Remote USB Key

Manjeera and V-Server USB Key

#### Password validation

Manjeera-HMI/ Manjeera-HMI iPad

Manjeera-Remote

Manjeera Scada and Manjeera-Server

Manjeera-Server

#### License Validation

License validation is restricted to one license per device. There are five types of licenses, one for each function (See above). Check the type of license for the function(s) you wish to use it for.

Note\*: When reinstalling the application software on the same computer, the same password is valid. However, if you initialize the OS or change the device to use the application software, the password becomes invalid. In this case, you must go through the license validation procedure again to get a new password.

\*Excluding the cases of using a USB license key

10

#### PLC models compatible with MANJEERA

Manufacturer	Models	V9 series	TS2060	V7 ceries	Mania		era Ver.4 Manjeera HMI iPad	Manjeera	Manjeera Ver		
Manufacturer		V8 series TS2060i	152060	V7 series	1:1	era HMI 1:n	iPad 1:1/1:n	Remote & Manjeera Server	Manjee 1:1	ra HMI 1:n	Manjeera Remote & Manjeera Server
uji Electric	MICREX-F series MICREX-F series V4 Compatible MICREX-F Tlink	<i>y</i>	<i>√ √ −</i>	\ \ \	√ √ -	√ √ -	-	\ \ \	√ √ -	√ √ -	√ √ √*16
	MICREX-F LIINK MICREX-F TIINK V4 Compatible SPB(N mode)&FLEX-PC series SPB(N mode)&FLEX-PC CPU FLEX-PC COM(T) FLEX-PC(T) FLEX-PC (PU(T) FLEX-PC (PU(T) FLEX-PC (PU(T) MICREX-SX(TIINK) MICREX-SX(TIINK) MICREX-SX(FIINK)	<i>y</i>	- - - -/	<i>'</i>	- √ √	- /	-	\ \ \	- - - -	- -	- /
	FLEX-PC COM(T) FLEX-PC (T)	:	-	1	-	-	-	-	-	-	-
	FLEX-PC (PU(1) FLEX-PC(OPCN-1) MICREX-SX(Tlink)		-	√ √ √*12	-	-	-	- - - *3	-	-	- ✓ *3.12.16
	MICREX-SX(OPCN-1) MICREX-SX(SX bus) MICREX-SX SPH/SPB/SPM/SPE/SPF series	✓ *12 ✓	-	✓ *12 ✓ *12 ✓ *12		-	-	✓ *3.12 ✓ *3 ✓ *3	- - √*12	-	✓ *3.12.16 ✓ *3.12.16 ✓ *3.12.10
Adept	MICREX-SX SPH/SPB/SPM/SPE/SPF CPU MICREX-SX(Ethernet) AAC Protocol	1	-	√ *12 √ *12	√ √	- /	-	√ *3 √ *3	✓ *12 ✓ *12	- ✓ *12	✓ *3.12 ✓ *3.12
Allen-Bradley	PLC-5 PLC-5(Ethernet) SLC500 SLC500(Ethernet TCP/IP)	√ √	-	1	√ √	1	- /	<i>\</i>	-	-	-
	SLC500 SLC500(Ethernet TCP/IP) NET-ENI(SLC500 Ethernet TCP/IP) NET-ENI(MicroLogix Ethernet TCP/IP)	√ √ √	-	<i>y y</i>	√ √	√ √ √	- - - - -	√ √	-	-	-
	Micro Logix	\ \ \	- /	- -	4	1	-	<i>y</i>	- /	-	- /
	Micro Logix(Ethernet TCP/IP) Control Logix/Compact Logix Control Logix(Ethernet) Micro800 Controllers	<i>y y</i>	-	1	√ √ √	- /	- /	√ *2 √ *2 √ *2	\ \ \	- /	√*2 √*2 √*2
Automationdirect	Micro800 Controllers(Ethernet TCP/IP)	-	-	- /	-	-	-	√ *2 -	· -	√ -	√ *2 -
	Direct LOGIC(K-Sequence) Direct LOGIC(K-Sequence) Direct LOGIC(Ethernet UDP/IP) Direct LOGIC(Modbus RTU)	\frac{1}{\sqrt{1}}	- /	\frac{1}{\sqrt{1}}	√ √	- - - - -	-	\frac{1}{4}		-	
Azbil Baldor	MX series DMC50(CTRL) Mint	*9	*9	<i>y y</i>	-	-	-	-	-	-	-
Baumuller Beckhoff	BMx-x-PLC ADS Protocol(Ethernet) Tag ADS Protocol(Ethernet)	<i>y y</i>	-	-	4	- /	- /	<i>\ \ \ \</i>		- /	- /
ZIMON	BP Series CP Series XP Series	4	1	-	<i>y y</i>	-		<i>\ \ \ \</i>	-	-	-
	S Series(Ethernet)	√ √	-	-	√ √	- - - - -	- ✓ *21	√ √	-	-	-
DELTA	CP3E DVP series DVP-SE(MODBUS ASCII)	4	1	-	√ √	- - -	-	1	- -		- -
ATON Cutler-Hammer MERSON	DVP-SE(MODBUS TCP/IP)  ELC  EC10/EC20/EC20H (MODBUS RTU)  Power Mate	\ \ \	- /	<b>/</b>	<i>y y</i>	√ √ √	-	\ \ \		-	- /
ANUC FATEK AUTOMATION ESTO	FACON FB series	<i>y</i>	1	<i>y</i>	<i>'</i>		-	<i>y</i>	- /	- ✓	- /
UFENG GE Fanuc	FEC APC Series Controller 90 series 90 series(SNP-X)	1	1		√ √	√ √	-	<i>y</i>	-		-
	90 series(SNP-X) 90 series(SNP) 90 series(Ethernet TCP/IP) RX3i(Ethernet TCP/IP)	\frac{1}{4}	√ √ -	-	√ √	- - - -		<i>\ \ \ \</i>	-	-	-
Hitachi	HIDIC-S10/2alpha-S10mini	4	- /	- /	<i>\ \ \ \</i>	-	-	1	- 4	-	- /
	HIDIC-S10/2alpha,S10mini(Ethernet) HIDIC-S10/4alpha HIDIC-S10/ABS	<i></i>	-	1	<i>y</i>	-	-	√ √	-	-	-
	HIDIC-S10(OPCN-1) HIDIC-S10V HIDIC-S10V(Ethernet)	√ √ √		✓ ✓ ✓	- - - -			\frac{1}{4}	-		-
litach Industrial Equipement Syster	ms HIDIC-H HIDIC-H (Ethernet) HIDIC-EHV	\ \ \ \	*15	1	4	1	-	4		-	
Honeywell	HIDIC-EHV(Ethernet) Universal Modbus RTU Universal Modbus TCP/IP(Ethernet)	-	-	<i>y y</i>	-	-	-	-	-	-	-
YUNDAI DEC	HIS Robot(MODBUS RTU) HI4 Robot(MODBUS RTU) MICRO3	<i>y y</i>	1	-	<i>\ \ \ \</i>	\ \ \	-	<i>\ \ \ \</i>	-		-
DEC	MICRO Smart MICRO Smart Pentra MICRO Smart (Ethernet TCP/IP)	<b>V</b>	1	-	4	1	-	1	<b>√</b>	-	-
etter TEKT		√ ✓*17 ✓	-	-			-				-
	TOYOPUC(Ethernet) TOYOPUC(Ethernet) TOYOPUC(Ethernet PC10Mode) TOYOPUC(Ethernet PC10Mode)	<i>y</i>	-	-	√ √	<i>y y</i>	-	<i>y y</i>	<i>y</i>	√ √	1
EYENCE	TOYOPUC-Plus(Ethernet) TOYOPUC-Nano(Ethernet)	\ \ \	-	-	<b>V</b>	1	✓ *21 ✓ *21	1	-	-	-
KEYENCE	KZ series link KZ-A500 CPU KZ/KV series CPU	√ √ √	1	\ \ \	√ √ √	-	-	\frac{1}{4}	-	-	-
	K224/300 CPU KV10/24 CPU KV-700	√ √ √	\ \ \	1	√ √	-	-	\ \ \	- - - -	-	- - - - -
	KV-700(Ethernet UDP/IP) KV-700(Ethernet TCP/IP) KV-1000			<i>'</i>	- /	- /	- /	- - - /	- /	- -	- /
	KV-1000(Ethernet TCP/IP) KV-3000/5000	<i>y</i>	-	· ·	<i>'</i>	-	-	✓ ✓	4		1
	KV-3000/5000(Ethernet TCP/IP) KV-7000/8000(Ethernet TCP/IP) KV Nano	<i></i>		-	√ √	· /	-	\frac{1}{4}	-	-	-
COYO ELECTRONICS	KV Nano(Ethernet TCP/IP) SU/SG SR-T	√ √ -	- /	- /	· -	√ √ -	-	√ √ -	-	-	-
	SU/SG SR-T SR-T(K prt) SU/SG(K-Sequence) SU/SG(Modbus RTU)	\ \ \ \	1	4	\ \ \	-	-	\ \ \	-	- :	-
S	MASTER-K10/60/200 MASTER-K500/1000 MASTER-KxxxS	-	-	· /	<u> </u>	-	-		-	-	-
	MASTER-KxxxS CNET MASTER-K series(Ethernet)	✓ ✓	-	1	√ √ √	- - - -	- - ✓ *21	✓ ✓	<i>y</i> -	- - -	√ √ -
	GLOFA CNET GLOFA GM7 CNET GLOFA GM series CPU	4	1	-	<i>√</i>	√ √ -	-	1	-	-	-
	GLOFA GM series CPU GLOFA GM series(Ethernet UDP/IP) GLOFA GMR series(Ethernet) YGT/YGK series (NFT	-	-	<i>y y</i>	-	-	-	-	-	-	-
	XGT/XGK series CNET XGT/XGK series CPU XGT/XGK series(Ethernet)	<b>V</b>	-	<i>y</i>	√ √	- /	- ✓ *21	√ √	- /	-	- /
	XGT/XGI series CNET XGT/XGI series CPU XGT/XGI series(Ethernet)	\frac{1}{\sqrt{1}}	-	-	√ √		- - √ *21	\frac{1}{4}	√ √ √	√ √ √	\frac{1}{4}
MITSUBISHI ELECTRIC	A series link A series CPU A series(OPCN-1)	4	· ·	\ \ \	√ √ -	-	-	<i>J J</i>	√ √ -	-	\ \ -
	QnA series link QnA series CPU	√ √	- /	1	- - - - -		-	√ √	- - - - -	- -	- - - - -
	QnA series(Ethernet) QnH(Q) series link OnH(A) series CPU	4	- - - /	<i>'</i>	√ √ -	√ √ -	-	<i>\ \ \ \</i>	√ √ -		√ ✓ -
	OnH(O) series CPU QnU series CPU Q00J/00/01 CPU	4	1	√ √*6	√ √ √	-	-	\ \ \	√ √*6 √	-	\frac{1}{4}
	QnH(Q) series(Ethernet) QnH(Q) series link (Multi CPU)	✓ ✓	- /	1	√ √	- - - -	-	✓ ✓	<i>√</i>	- - -	1
		1									
	QnH(Q) series (Multi CPU) (Ethernet) QnH(Q) series CPU (Multi CPU) QnH(Q) series(Ethernet ASCII) QnH(Q) series (Multi CPU) (Ethernet ASCII)	<i>y y</i>	-	-	√ √ √	-	-	\ \ \	√ √ -		√ √ -

On Userles(Bullit in Ethernet)

On Userles(Bullit in Ethernet)

On Userles(Bullit in Ethernet)

On Userles(Bullit in Ethernet)

V - V V V V V 1

On Userles (Multi CPU) (Bullit in Ethernet)

V: Supported -: Not supported -: Not supported Note 1: Manijeera HMI does not support Multi-link or Multi-link connection. Note 2: PLC\_CTL macro command is not available for Remote mode. \*1: Drivers that do not support 1:1 communication, the message "Remote mode not supported" is prompted. In such case, force to proceed. \*2: In case Event Setting in Manijeera-Server is "Trigger: Memory, Type: Bit", upper bits in a double-word (bit 16 to 31) are not available. \*3: Monitoring STRING type is not available.

\*4: Only RS-422 supported. \*5: In case Event Setting in Manijeera-Server is "Trigger: Memory, Type: Word", even double-word device is processed in word unit. \*6: For Q10UDH/Q13UDH/Q20UDH/Q26UDH, connection to RS232C port on the CPU is not supported.

12

The state of the state of	20.00	V9 series					era Ver.4	Maniana		njeera Ver.	
Manufacturer	Models	V8 series TS2060i	TS2060	V7 series	Manjed	era HMI	Manjeera HMI iPad 1:1/1:n	Manjeera Remote & Manjeera	Manje 1:1	era HMI 1:n	Manjee Remote Manjee
MITSUBISHI ELECTRIC	L series link L series(Built-in Ethernet)	<i>J</i>	√ -	-	\ \ \	1:n	- - √*21	Server	√ √ *13	√ √ *13	Serve
	L series CPU A series(CC-LINK) QnA series(CC-LINK)	√ √	-	- /	- -	-	-	<b>4</b>	-	-	-
	QnA series(CC-LINK) QnH(Q) series(CC-LINK) FX series CPU	\frac{1}{\sqrt{1}}	-	<i>y y</i>	-	-	-	<i>y y</i>	-	-	-
	FX2N/1N series CPU FX1S series CPU	1	√ √	1	1	-	-	√ √	- -	-	-
	FX series link(A-prt) FX3U/3UC/3G series CPU FX3U/3GF series (Fthernet)	\frac{1}{4}	<i>\ \</i> -	<i>\ \</i> -	4		-	\ \ \	\ \ \	-	\ \ \ \
	FX3U/3GE series (Ethernet) FX3U/3UC/3G series link (A-prt) FX5U/5UC series	✓ ✓	1	-	1	1	-	√ √	-	-	-
	FX5U/5UC series (Ethernet) Net10 Alink+Net10		-	- /	-	-	√ *21 - -	-	-	-	-
	Q170MCPU(Multi CPU) Q170 series(Multi CPU)(Ethernet)	√ √	-	-	√ √	-	- ✓ *21	√ √	-	-	-
	iQ-R seires (Built-in Ethernet) iQ-R seires link iQ-R seires(Ethernet)	\ \ \	- /	-	4	√ √ √	✓ *21 - ✓ *21	<i>y y y</i>	4	4	4
MODICON MOELLER	Modbus RTU PS4 SYSMAC C	<b>4</b>	√ √	1	1	-	-	✓ ✓	-	-	-
OMRON		\ \ \	-	1	-	-	-	<i>y</i>	-	-	-
	SYSMAC CV SYSMAC CS1/CJ1/CJ2 SYSMAC CS1/CJ1/CJ2 DNA	✓ ✓	<i>y</i>	1	√ √	<i>√</i>	-	<i>'</i>	<b>√</b>	√ -	✓ -
	SYSMAC CS1/CJ1/CJ2/CP Series(Ethernet) SYSMAC CS1/CJ1/CJ2/CP Series(Ethernet Auto) SYSMAC CS1/CJ1/CJ2/CP Series (DNA/Ethernet)	<i>\ \ \ \</i>	-	<i>J</i>	4	√ √ √	-	√ √*7 ✓	✓ *19.20 ✓ *19.20	✓ *19.20 ✓ *19.20	√ **7 ✓ *7
Panasonic	NJ Series(EtherNet/IP) FP Series(RS232C/422) FP Series(TCP/IP)	4	-	- /	<i>y</i>	<i>y</i>	-	√ √ *2.5	-	-	/ *:
	FP Series(TCP/IP) FP Series(UDP/IP) FP-X(TCP/IP)	<b>4</b>	-	1	1	<i>\</i>	-	<i>\</i>	1	1	1
	FP7 Series(RS232C/422)	<i>J</i>	- -	-	√ √	√ √ √	- - - *21	<i>y y</i>	1	4	4
RS Automation	P7 Series(Ethernet) NX7/NX Plus Series(70/700P/CCU+) N7/NX Series(70/700/750/CCU)	1	1	<b>V</b>	<i>y</i>	1	-	√ √	<b>V</b>	1	1
	NX700 Series(Ethernet) X8 Series X8 Series(Ethernet)	\ \ \ \	- -	-	<i>\ \ \</i>	√ √ √	✓ *21 - ✓	<i>y y y</i>	\ \ \	\ \ \	4
SAIA	PCD PCD S-BUS(Ethernet)	√ √	-	<i>y</i>	- ✓	- ✓	-	√ √	-	-	-
SAMSUNG	SPC series N_plus SECNET	\frac{1}{\sqrt{1}}	1	\ \ \	<i>\ \ \</i>	4	-	\ \ \	- /	- /	- /
SHARP	JW series JW100/70H COM port	1	1	1	1	√ √ -	-	1	-	- -	-
	JW(FL-Net)	-	-	1	√ -	-	-	-	-	-	-
	JW series(Ethernet) JW300 series IW311/313/321/322 series/Ethernet)	\ \ \		1	<i>y y</i>	√ √	-	<i>y y</i>	-	-	-
SINFONIA TECHNOLOGY	JW311/312/321/322 series(Ethernet) JW331/332/341/342/352/362 series(Ethernet) SELMART	· /	- 1	1	√ √	<i></i>	-	· /	-	-	:
Siemens	S5 S5 PG port S5 V4 Compatible		-	4	-	-	-	- ✓ *8	-	-	-
	57 57-200 PPI	- - - -	- - - - -	1	- -	-	-	√*8 ✓*8	-	-	
	S7-200(Ethernet ISOTCP) S7-300/400MPI	4	-	- /	-	-	-	√ *8 √ *8	-	-	7,
	\$7-300MPI(V-MPI) \$7-300MPI(HMI ADP) \$7-300MPI(PC ADP) \$7-300MPI(Helmholz SSW7 ADP)	-	-	1	-	-	-	-	-	-	-
	S7-300/400(Ethernet ISOTCP)	- /	-	1	- 1	- /	- /	- ✓ *8	- /	- /	- 4,
	S7-300/400(Ethernet TCP/IP PG protocol) S7-400(Multi CPU) (Ethernet TCP/IP PG protocol) S7-1200/1500(Ethernet ISOTCP)	-	-	1	-	-	-	✓ *8 - ✓ *8	-	-	-
	S7-1200/1500(Ethernet ISOTCP) S7-1200/1500 Tag(Ethernet ISOTCP) S7 CPU319 (Ethernet)	· -	-	- /	√ -	-	· ·	√ *8 -	-	-	-
	LOGO!(Ethernet ISOTCP) S7 PROFIBUS-DP TI500/505	<i>J</i>	-	- /	-	-	-	√*8 √*8 √*8	-	-	√ *8
TAIAN	TI500/505 V4 Compatible TP02	· ·	·	1	· -	· ·	-	√ *8 -	-	-	-
TECO Telemecanique	TPO3(MODBUS RTU) TSX Micro	<b>4</b>	1	- /	-	-	-	√ √	-	-	-
TOSHIBA	T series T series/V series(T compatible) T series/V series(T compatible)(Ethernet UDP/IP)	*14	*14	-	- /	- - - -	-	- /	-	-	-
	EX series nv series(Ethernet UDP/IP)	<b>√</b>	- -	· -	√ √	4	-	1	-	-	-
Toshiba Machine Toyo Denki	TC200 μ GPCsx(OPCN-1) μ GPCsx(SX bus)	\ \ \	-	4	-	-	-	<i>y y</i>	-	-	-
	μ GPCsx series μ GPCsx CPU	<b>V</b>	1	1	1	-	-	1	-	-	-
TURCK Ultra Instruments	μ GPCsx series(Ethernet)  BL Series Distributed I/O(MODBUS TCP/IP)  UIC CPU(MODBUS ASCII)	<b>V</b>	-	-	<i>\</i>	√ √	<i>y</i>	<i>y</i>	-	-	-
UNITRONICS	M90/M91/Vision Series(ASCII) Vision Series(ASCII Ethernet TCP/IP)	4	-	-	<i>'</i>	<i>√</i>		<b>*</b>	-	-	-
VIGOR VIPA	M series MPI(RS232C Direct)	-	-	1	-	-	-	-	-	-	-
KINJE Yaskawa Electric	XC Series(MODBUS RTU) MEMOBUS CP9200SH/MP900	\frac{1}{\sqrt{1}}	\ \ \	- - - -	√ √ √	√ √	-	√ √ √	- - - -	- - - -	/* /*
	MP2300(MODBUS TCP/IP) CP/MP EXPANSION MEMOBUS (UDP/IP)	<b>4</b>	-	· /	1	<i>√</i>	-	√ √	1	1	1
	MP2000 series MP2000 series(UDP/IP) MP3000 series	<i>J</i>	-	-	4	\ \ \	-	<i>'</i>	<i>y</i>	<i>\</i>	4
/-l	MP3000 series (Ethernet UDP/IP) MP3000 series EXPANSION MEMOBUS (Ethernet)	· /	-	-	<i>\</i>	<i>\</i>	- ✓ *21	· /	-	-	-
okogawa Electric	FA500 FA-M3 FA-M3R	- - - -	- /	1	- - -	- - - -	-	- ✓ *11 ✓ *11	- /	- /	- /*
	FA-M3/FA-M3R(Ethernet UDP/IP) FA-M3/FA-M3R(Ethernet UDP/IP ASCII)	✓ ✓	-	-	√ √	4	-	✓ *11 ✓ *11	-	-	√* -
	FA-M3/FA-M3R(Ethernet TCP/IP) FA-M3/FA-M3R(Ethernet TCP/IP ASCII) FA-M3V	4	-	-	4	\ \ \	<i>y</i>	✓ *11 ✓ *11 ✓ *11	-	-	-
	FA-M3V(Ethernet ) FA-M3V(Ethernet ASCII)	4	-	-	√ √	<i>√</i>	√ *21 ✓ *21	✓ *11 ✓ *11 ✓ *11	-	-	-
WAGO	FA-M3R(FL-Net) 750 series(MODBUS RTU)		- /	-	- ✓	- ✓	-	- /	-	-	-
SS-Smart Software Solutions Others	750 series(MODBUS Ethernet) CODESYS V3(Ethernet) Universal Serial	✓ ✓*18 ✓		-			✓ *21 - -			-	-
	FL-Net PROFIBUS-DP	<i>y</i>	-	1	-	-	-	1	-	-	-
	DeviceNet EtherCAT Without PLC connection	√ ✓ *18	-	-	-	-	-	\ \ \	-	-	-
	MODBUS RTU MODBUS RTU FXT Format	· · · · · · · · · · · · · · · · · · ·	1	-	<i>\</i>	- - - -	-	<i>\</i>	-	-	7
	MODBUS TCP/IP(Ethernet) MODBUS TCP/IP(Ethernet)Sub Station	√ √	-	1	√ √	<i>√</i>	- (*22	√ √	-	-	-
	MODBUS TCP/IP(Ethernet) EXT Format MODBUS ASCII	1		-	<b>√</b>	<b>√</b>	√ *22 -	1	-	-	-
	Modbus slave(RTU)	<b>/</b>	✓	1	1	-	-	✓	-	-	-

\* 7: Only "Transmission Mode 1" supported. ("Transmission Mode 2", which is signed BCD, is not supported.) \*8: PLC memory is not available when Event Setting in V-Server is "Trigger: Memory, Type: Bit." \*9: Integrated to T Series/V Series (Tompatible). \*15: RS-232C connection not supported. \*10: Only i series supported. \*17: V9 series not supported. \*18: Only V9 series supported. \*19: When using EMn (extended data memory), specify the bank number 0 to C (HEX). \*20: CP serires is not supported. \*21: Select "LAN(TCP)" for [Target Port No.] in the [Connection Device Selection] settings. \*22: Sub Station is not supported.

### Temperature controllers, Servos and Inverters compatible with MANJEERA

Temperat		1 VO3 U		CITCIS			Manjeera Ver.3		
Manufacturer	Models	V9 series V8 series TS2060i	TS2060	V7 series	Manjeera HMI	Manjeera Ve Manjeera HMI iPad	Manjeera-Remote & Manjeera-Server	<del></del>	Manjeera-Remote  Manjeera-Server
Fuji Electric	PYX(MODBUS RTU) PYH	-	-	1	-	-	-	-	-
	PXR(MODBUS RTU) PXF(MODBUS RTU)	1	1	-	4	-	1	-	-
	PXG(MODBUS RTU) PXH(MODBUS RTU)	1	1	1	1	-	1	-	-
	PUM(MODBUS RTU) F-MPC04P(Loader)	1	1	√ √	1	-	√ √	-	-
	F-MPC Series /FePSU FVR-E11S	1	1	1	1	-	1	-	-
	FVR-E11S(MODBUS RTU) FVR-C11S	-	-	1	-	-	-	-	-
	FVR-C11S(MODBUS RTU) FRENIC5000G11S/P11S	1	1	1	√ √	-	√ √	-	-
	FRENIC5000G11S/P11S(MODBUS RTU) FRENIC5000VG7S	-	-	1	-	-	-	-	-
	FRENIC5000VG7S(MODBUS RTU) FRENIC-Ace(MODBUS RTU)	<i>'</i>	1	-	√ √	-	√ √	-	-
	FRENIC-Eco(MODBUS RTU) FRENIC-HVAC/AQUA(MODBUS RTU)	<i>y</i>	1	-	✓ ✓	-	√ ✓	-	-
	FRENIC MEGA(MODBUS RTU) FRENIC MEGA SERVO(MODBUS RTU)	✓ ✓	1	-	√ ✓	-	√ √	-	-
	FRENIC-MINI(MODBUS RTU) FRENIC-Multi(MODBUS RTU)	<i>\</i>	1	1	<i>√</i>	-	1	-	-
	FRENIC-VG1(MODBUS RTU) FRENIC Series (Loader)	1	1	-	✓ ✓	-	1	-	-
	HFR-C9K HFR-C11K	4	1	1	4	-	1	-	-
	HFR-K1K PPMC(MODBUS RTU)	· /	1	-	1	-	1	-	-:-
	FALDIC-alpha series FALDIC-W series	1	<i>'</i>	4	4	-	1	-	-
	PH series	1	✓	<b>V</b>	<b>✓</b>	-	1	-	-
	PHR(MODBUS RTU) WA5000 ADD N(MODBUS RTU)	<b>V</b>	<i>\</i>	√ √	\ \ \	-	1	-	-
	APR-N(MODBUS RTU) ALPHAS (MODBUS RTU)	1	1	-	4	-	1	-	-
	ALPHA5 Smart (MODBUS RTU) ALPHA7 (MODBUS RTU)	4	√ √	-	1	-	1	-	-
	WE1MA(Ver.A)(MODBUS RTU) WE1MA(Ver.B)(MODBUS RTU)	√ √	√ √	-	4	-	1	-	:
	WSZ series WSZ series(Ethernet)	√ √	-	-	1	- √*3	√ √	-	-
Agilent Azbil	4263 Series SDC10	4	1	- /	4	-	1	-	
	SDC15 SDC20	1	1	-	1	-	1	-	-
	SDC21 SDC25/26	<i>y</i>	1	<b>√</b>	1	-	1	-	-
	SDC30/31 SDC35/36	1	4	1	1	-	1	-	-
	SDC45/46 SDC40A	1	4	-	1	-	1	-	-
	SDC40A SDC40G DMC10	4	4	4	1	-	4	-	-
	DMC50(CTRL)	*1	*1	1	*1	-	*1	-	-
	DMC50(COM) AHC2001	<i>\</i>	1	1	1	-	1	-	-
	AHC2001+DCP31/32 DCP31/32	1	1	1	1	-	1	-	-
	NX(CPL) NX(Modbus RTU)	4	1	-	1	-	1	-	-
A&D	NX(Modbus TCP/IP) AD4402(MODBUS RTU)	✓ ✓	- /	- ✓	√ √	-	✓ ✓	-	-
Banner	AD4404(MODBUS RTU) PresencePLUS(Ethernet/IP(TCP/IP))	<i>y</i>	-	-	4	-	1	-	-
Bosch Rexroth CHINO	IndraDrive DZ1000(MODBUS RTU)	-	-	-	-	-	-	-	-
	DZ2000(MODBUS RTU) KP1000	-	-	4	-	-	-	-	-
	LT400 Series(MODBUS RTU) DP1000	4	1	√ √	1	-	1	-	-
	DB1000 DB1000B(MODBUS RTU)	-	-	✓ -	- /	-	- /	-	-
	KR2000(MODBUS RTU) LT230(MODBUS RTU)	4	1	-	1	-	1	-	-
	LT300(MODBUS RTU) LT830(MODBUS RTU)	4	1	-	<b>*</b>	-	1	-	-
Danfoss DELTA TAU DATA SYSTEMS	VLT series PMAC	-		<b>√</b>		-		-	-
EUROTHERM	PMAC(Ethernet TCP/IP) 2400 series (MODBUS RTU)	4	-	-	4	<b>√</b>	-	-	-
FATEK AUTOMATION Gammaflux	FACON FBs series(Ethernet)	<i>\</i>	-	-	1	√ *3	1	-	-
	G24(Ethernet TCP/IP)	<b>*</b>	-	-	1	<b>√</b>	1	-	-
HBM Hitachi Industrial Equipment System		- - /	- /	<b>V</b>	- /	-	-	-	-
	SJ700 series L300P series	-	-	- /	-	-	-	-	-
Honeywell	SJ Series P1 (MODBUS RTU) Universal Modbus RTU	-	-	1	-	-	-	-	-
IAI	DC1000 Super SEL Controller	-	-	1	-	-	-	-	-
	X-SEL Controller ROBO CYLINDER(RCP2/ERC)	1	√ √	1	√ √	-	√ √	-	-
	ROBO CYLINDER(RCS) ROBO CYLINDER(RCS/E-CON)		- ✓	-	- ✓	-	- ✓	-	-
	TX-C1 PCON/ACON/SCON(MODBUS RTU)	-	- ✓	1	-	-	-	-	-
KEYENCE Koatsu Gas Kogyo	DL-RS1A(SK-1000) R-BLT	1	1	- /	1	-	1	-	-
Koganei	IBFL-TC ABSRCD/ABSRCX	· ·	√ -		· /	-	· /	-	-
Lenze	ABPRC Servo Drive 9400(Ethernet TCP/IP)		-	· /		- ✓		-	-
LS	iss igs	-	-	1	-	-	-	-	-
MITSUBISHI ELECTRIC	LGRF-H Reader FR-*500	-	-	-	-	-	-	-	
S S S S S S ELLE TIME	FR-V500 MR-J2S-*A	4	1	1	<b>*</b>	-	<b>V</b>		-
	MR-J2S-*CL	<b>*</b>	<b>V</b>	4	7	-	7	-	-
	MR-J2S-*CP MR-J3-*A	- /	- -	1	- -	-	- -	-	-
	MR-J3-*T MR-J4-*A	1	√ ✓	-	√ √	-	√ √	-	-
	FR-*700(MODBUS RTU) FR-E700	-	-	-	-	-	-	-	-
MOOG M-SYSTEM	J124-04x series R1M series (MODBUS RTU)	1	✓ ✓	<b>√</b>	√ √	-	1	-	-
NIKKI DENSO	R5 series (MODBUS RTU) SQB-6432B	-	-	4	-	-	-	-	-
NITTOKU OHKURA	ITS-HRW110 EC5500S	-	-		✓ -	-	√ -	-	-
	EC5800 EC5600S	-		4		-	-	-	
	EC5900A	-	-	· /	-	-	-	-	-

✓: Supported -: Not supported
✓: Supported -: Not supported is not available for Remote mode.
\*1: Integrated to DMC50(COM). \*2: V8 series not supported. \*3: Select "LAN(TCP)" for [Target Port No.] in the [Connection Device Selection] settings.

			As of July										
		\/Oi				Manjeera Ve	er.4	Manjeera Ver.3					
Manufacturer	Models	V9 series V8 series TS2060i	TS2060	V7 series	Manjeera	Manjeera	Manjeera-Remote	,ajoo.a	Manjeera-Remot				
William To the Control of the Contro	100				НМІ	HMI iPad	Manjeera-Server	HMI	Manjeera-Server				
OMRON	E5AK E5AK-T	4	1	1	4	-	<b>/</b>	-	-				
	E5AN/E5EN/E5CN/E5GN E5AR/E5ER	4	√ √	1	1	-	1	-	-				
	E5CC/E5EC/E5AC/E5DC/E5GC	✓	✓	-	✓	-	✓	-	-				
	E5CK E5CK-T	4	√ √	1	1	-	✓ ✓	-	-				
	E5CN-HT E5EK	4	1		<i>y</i>	-	4	-	-				
	E5EK-T E5ZD	-		✓ ✓		-	- /	-	-				
	ESZE ESZN	1	1	1	4	-	1	-	-				
	V600/620/680	1	1	1	1	-	1	-	-				
	3G3MV(MODBUS RTU) KM20	-	- ✓	-	-	-		-	-				
	KM100 V680S(Ethernet TCP/IP)	4	-	-	4	-	4	-	-				
Orientalmotor	EJ1 High-efficiency AR Series(MODBUS RTU)	<i>√</i>	1	-	1	-	√ √	-	-				
	CRK Series(MODBUS RTU) MINAS A4 Series	<i>'</i>	· /	-	· /	-	· /	-	-				
ranasonic	LP-200/LP-F10	-	-	✓	-	-	-	-	-				
	LP-300 LP-400		- ✓	√ √	- /	-		-	-				
	LP-V10 LP-W052	-	-	4	-	-	-	-	-				
Automation MSUNG NKEN ELECTRIC NMEI nRex NYO ARP	KW Series LP-RF series	√ √*2	√ √	-	✓ ✓	-	✓ ✓	-	-				
	LP-RF series(Ethernet)	√ *2	-	-	7	1	7	-	-				
Parker RKC	LVD/HPD SR-Mini(MODBUS RTU)	-	- /	1	-	-	-	- 1	- ✓				
	CB100/CB400/CB500/CB700/CB900(MODBUS RTU) SR-Mini(Standard Protocol)	<b>*</b>	√ √	√ √	1	-	1	-	-				
inasonic  Automation  MSUNG INKEN ELECTRIC  INMEI INFEX INMYO INFEX INMYO INKO TECHNOS	REX-F400/F700/F900(Standard Protocol) REX-F9000(Standard Protocol)	1	<i>\</i>	1	1	-	<i>V</i>	-	-				
	SRV(MODBUS RTU) REX-B800(Standard Protocol)	✓	<b>√</b>	✓	1	-	<b>√</b>	-	-				
	MA900/MA901(MODBUS RTU)	-	- /	√ √	- /	-	- /	-	-				
	SRZ(MODBUS RTU) FB100/FB400/FB900(MODBUS RTU)	· ·	4	-	4	-	4	-	-				
RS Automation	CSD5(MODBUS RTU) Moscon-F50(MODBUS RTU)	4	1	-	<b>√</b>	-	4	-	-				
SAMSUNG SANKEN ELECTRIC	MOSCON-E7 SAMCO-e	-	-	√ √	-	-	-	-	-				
	SAMCO-vm05	-	-	1	-	-	-	-	-				
SANMEI	Cuty Axis Cuty Axis3	-	-	√ √	-	-	-	-	-				
SanRex SANYO	DC AUTO (HKD type) PB1 series	-	-	4	-	-	-	-	-				
SHARP	DS-30D DS-32D	<i>√</i>	1	√ √	1	-	✓ ✓	-	-				
SHIMADEN	Shimaden Standard Protocol	✓	1	✓	1	-	1	-	-				
SHINKO TECHNOS	C Series FC Series	<b>√</b>	1	√ √	1	-	<b>√</b>	-	-				
S Automation  AMSUNG ANKEN ELECTRIC  ANMEI  anRex ANYO  HARP HIMADEN HINKO TECHNOS  ICK IEMENS  BOHO  OKYO CHOKOKU PRODUCTS  OSHIBA  DOSHIBA MACHINE  LIVAC  NIPULSE	GC Series DCL-33A	4	4	4	4	-	4	-	-				
	JCx-300 Series PC-900	1	1	<b>V</b>	✓ ✓	-	4	-	-				
	PCD-33A	1	1	-	1	-	1	-	-				
	ACS-13A ACD/ACR Series	√ ✓	1	-	1	-	1	-	-				
	WCL-13A PCA1 Series	<b>√</b>	1	-	1	-	<i>'</i>	-	-				
SICK Siemens	DME3000 S120(Ethernet ISOTCP)		-	-	- /	- /	- /	-	-				
Siemens	MicroMaster 400 USS Protocol	-	-	1	-	-	-	-	-				
SUS	XA-A*	✓ <b>/</b>	1	-	✓	-	<b>√</b>	-	-				
TOHO	TTM-000 TTM-00BT	4	1	-	1	-	4	-	-				
TOKYO CHOKOKU PRODUCTS	TTM-200(MODBUS RTU) MB3315/1010	4	1	-	4	-	4	-					
TOSHIBA	VF-S7 VF-S9	1	1	√ √	✓ ✓	-	4	-	-				
	VF-S11	1	1	1	1		4	-	-				
	VF-S15 VF-A7	1	1	1	1	-	1	-	-				
	VF-AS1 VF-P7	1	1	4	4	-	4	-	-				
	VF-PS1 VF-FS1	1	1	1	√ √	-	4	-	-				
	VF-MB1 VF-nC1	1	1	-	· /	-	· /	-	-				
TOSLUDA MACUUNE	VF-nC3	✓	<b>√</b>	-	✓	-	✓	-	-				
ULVAC	VELCONIC Series G-TRAN Series	1	1	-	√ √	-	√ √	-	-				
UNIPULSE	F340A F371	4	1	✓ ✓	4	-	4	-	-				
	F600 F800	-	-	1	-	-	-	-					
	F720A	1	<i>\</i>	-	· /	-	1	-	-				
YAMAHA	F805A RCX142	1	4	-	√ √	-	4	-	-				
	SRCD/SRCX PRC	-	-	1	-	-	-	-	-				
Yaskawa Electric	VS mini V7 series E-POSI series	-	-	1	-	-	-	-	-				
Vokogawa Electric	DX200(High-Speed Ethernet) UT100	1	- /		<b>V</b>	-	1	-	-				
TOROGAWA Electric	UT750	✓	✓	<b>V</b>	✓	-	✓	-	-				
	UT550 UT520	1	√ √	1	√ √	-	1	-	-				
	UT350 UT320	1	1	1	1	-	1	-	-				
	UT2400/2800 UT450	1	1	-	1	-	1	-	-				
	UP350	-	-	1	-	-	-	-	-				
	UP550 UP750	-	-	1	-	-	-	-	-				
	UM330 UM350	-	-	1	-	-	-	-	-				
	UT32A/35A(MODBUS RTU) UT52A/55A(MODBUS RTU)	1	<b>V</b>	-	1	-	1	-	-				
	UT75A(MODBUS RTU)	<b>V</b>	1	-	✓	-	1	-	-				
			-	-	1	✓	/	-	-				
Others	μR10000/20000(Ethernet TCP/IP) MODBUS RTU	1	<b>√</b>	-	1	-	1	1	<b>V</b>				
Others	μR10000/20000(Ethernet TCP/IP) MODBUS RTU MODBUS TCP/IP (Ethernet) General AE-LINK				<i>y y -</i>		· ·	√ √ -	√ √ -				

### **EXISTING LIST OF END USERS**





























































































#6-3-186 M & N, Jainagar Colony, Bhoiguda, Secunderabad, Telangana India 500080

### **MANUFACTURING UNIT**

C-211, Floral Deck Plaza, Rd no 12, Sunder Nagar, Andheri East, Mumbai, Maharashta 400093







