

PRODUCTS & SOLUTIONS



Sciengate Automation Malaysia



Sciengate Automation (M) Sdn Bhd



VERSION 2023

TABLE OF CONTENT

SMART FACTORY

- SMART 4.0
- ANDON SYSTEM FOR MANUFACTURING
- OVERALL EQUIPMENT EFFECTIVENESS (OEE)

HMI

- PROFACE
- SCHNEIDER ELECTRIC
- WECON

IOT

- RONDS
- BEANAIR
- EXEMYS
- FLOWLINE
- STS SENSORS
- KANSAI AUTOMATION/KARI-FINN

SENSORS

- LCM SYSTEMS
- FUTEK
- PAVONE SISTEMI

METROLOGY

- TAYLOR HOBSON
- MICRO EPSILON
- SOLARTRON METROLOGY

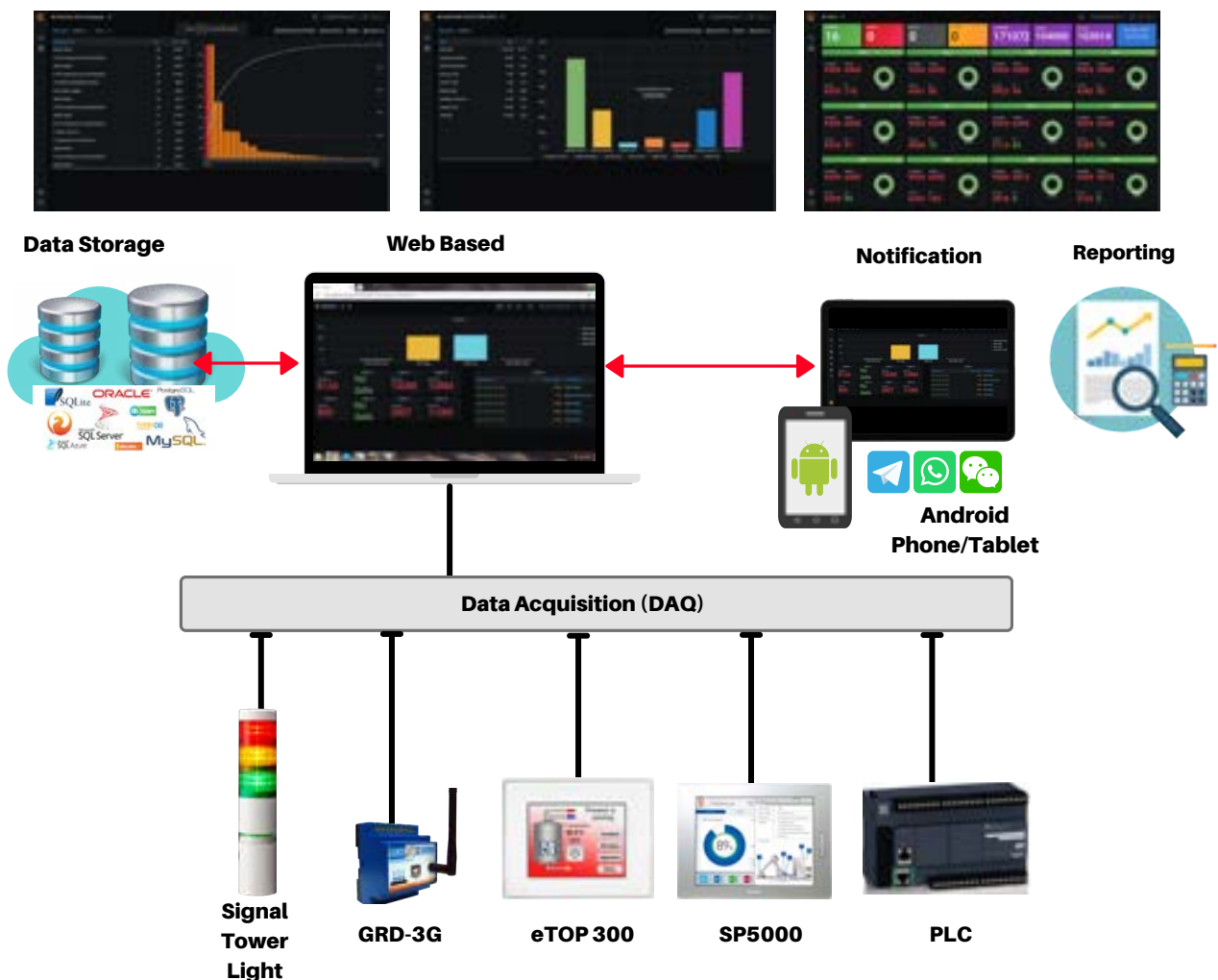


SMART 4.0

Software for Manufacturing Analytix in Real Time (SMART) 4.0 is a fully customizable and adaptable solution where customers require insight into what is happening in their shop floor.

With over 15 years of experience in solving manufacturer's data connectivity, we have come a long way in creating SMART 4.0 platform that uses the latest technology in IOT.

Architecture Smart 4.0





SMART 4.0

BENEFITS AND FEATURES SMART 4.0

- Encourage immediate reaction to quality, down time, and safety problems.
- Bring immediate attention to problems as they occur in the manufacturing process.
- Improve the ability of maintenance team to quickly identify and resolve manufacturing issues.
- Provide a simple and consistent mechanism for communicating information on the plant floor.
- All information is recorded down for future trace, analysis and future improvement

DASHBOARD SMART 4.0

The dashboard displays the following information:

FINAL AND FINISH LINE		DATE	TIME
		08.07.19	17:37
TARGET	06	REMAINING TARGET	24
PLAN	30		
LINE	ACTUAL	DIFFERENT	FTRR(%)
FINAL LINE	05	01	80%
FINISH LINE	02	04	50%



SMART 4.0

SMART 4.0 consist of the following modules:



- **Dynamic dashboard**

Collaborate and share shop floor information across various department. Aligns objective and goals easily with clear representation of expectation and results.



- **Analytix and Reporting Engine**

Supports key decision makers with insightful data from the shopfloor. Identify operation baseline, daily, weekly trends, key losses and many more. User defined reporting that can be published, shared and digitally documented.



- **User Interface**

Customized web based user interface for parameter, machine, production and maintenance entry or remarks



- **Data Storage**

Distributed or centralized database engine. Uses MS SQL or Postgre SQL as standard. Different SQL can be accommodated upon request.



- **Data Acquisition Module**

Interface to machine directly using serial, Ethernet or Wireless Solution. Reads machine information on demand in real-time



SMART 4.0

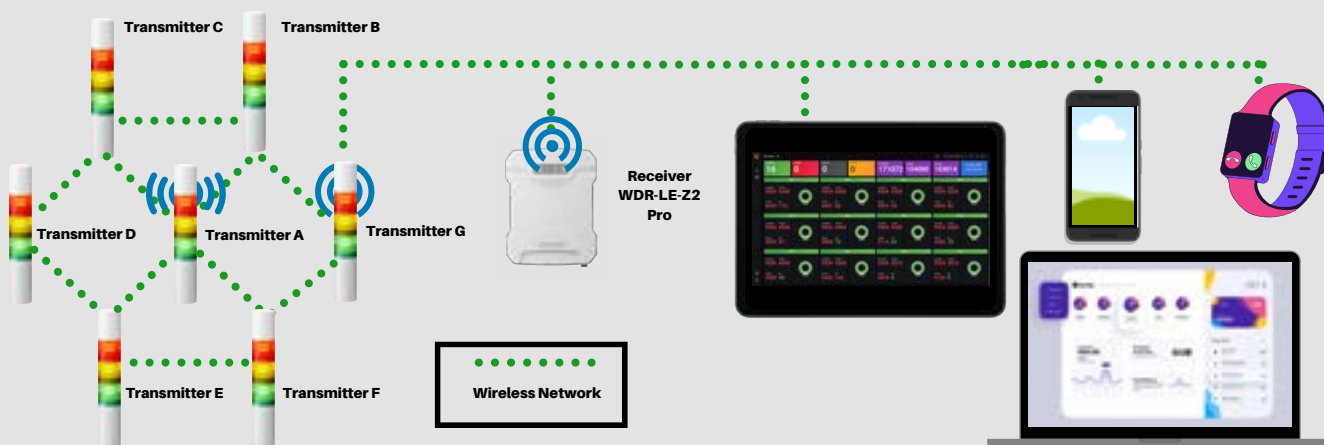
ANDON SYSTEM FOR MANUFACTURING

Andon systems are traditionally implemented as an alert and notification to notify problem in the shop floor requires urgent attention.

Alerts are displayed on a big display and placed on key areas that can be visually seen by all parties concerned.

SMART 4.0 enhances this further by tracking the time to resolve various problem and monitor the Overall Equipment Effectiveness (OEE) all in a single solution.

PATLITE WIRELESS ARCHITECTURE



PATLITE WD TRANSMITTER

WD-LR-Z2 Transmitter			WD-Z2 transmitter		
Signal Tower LR6 Transmitter WDT-6LR-Z2	Signal Tower LR5 Transmitter WDT-5LR-Z2	Wireless Data Acquisition System LR Transmitter WDT-4LR-Z2			
Corresponding Model LR6 Series	Corresponding Model LR5 Series	Corresponding Model LR4 Series			
Transmission Distance 20m *2	Current Consumption max 55mA	Transmission Distance 20m	Current Consumption max 55mA		
Telecommunication Protocols: IEEE-802.15.4 (Wireless Communications)			WDS-WIN01 WD System Setup Software		
			<ul style="list-style-type: none">Compatible Signal Tower : LE series*1Current consumption : typ.20mACommunication range : line of sight 20m*2		
			<ul style="list-style-type: none">Compatible Signal Tower : LME Series*1Current consumption : typ.20mACommunication range : line of sight 20m*2		

1. There are some restrictions to the compatibility of Signal Towers.
2. Due to the characteristics of radio waves, this value is only a reference point.
3. Please contact your local sales representative for the availability in your region.

PATLITE WD RECEIVER ADVANTAGES

Real-time Equipment Status Collection

Real-time Equipment Status Display on Andon Screen



Quality of wireless connection Diagnostics

Collaboration functions including Modbus/TCP and MySQL Database

✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



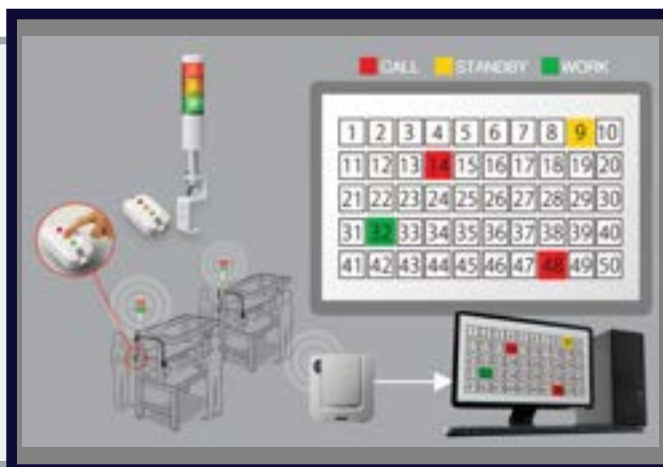
SMART 4.0

BEFORE

Maintenance calls from manual assembly stations are only visually displayed on signal towers. When a supervisor is away from a station or site, delays and production bottlenecks occur.

AFTER

With the WD installed in workstation, supervisors can now receive email alerts for maintenance calls when away from the site, greatly reducing bottlenecks.



BEFORE

No system in place to remotely monitor machines in real time. Goal is to share productivity among all facilities to improve company wide productivity.

AFTER

The WD system allows monitoring of all lines in multiple locations and in real-time. Workers are able to better understand how their efforts affect the bigger picture improving company productivity.

BEFORE

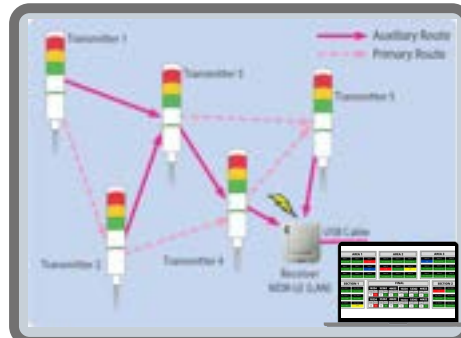
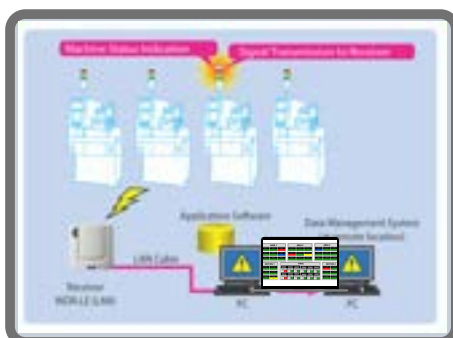
Production bottlenecks caused by machine down time and uneven production flow are surmounting. To address this issue, employees are creating daily machine reports which are tedious and inaccurate.

AFTER

The WD system enables us to monitor out line in real-time, quickly identify bottlenecks and address them. The PATLITE process can also determine the severity of machine issues for more effective predictive maintenance.



Process Visualization





SMART 4.0

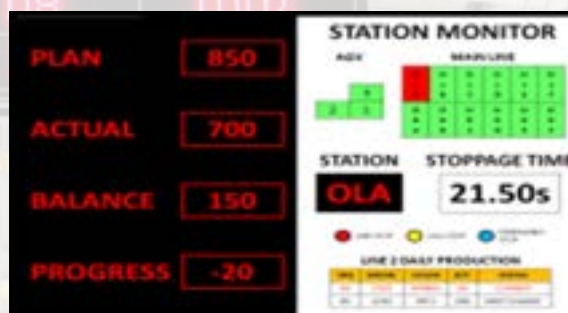
OVERALL EQUIPMENT EFFECTIVENESS (OEE)

SMART 4.0 OEE module can be implemented across various discrete and continuous manufacturing lines. SMART 4.0 helps customers to identify hidden losses and takes a pro-active approach to reduce these losses and translate it into productive manufacturing time

OEE DASHBOARD



Customised Software



Customised Software

Six Big Losses in Manufacturing

Overall Equipment Effectiveness

Availability Loss

- How long your machine is running
- How long is it in standstill (waiting)
- How long is it in stop (under repair or no production)

Performance loss

- What is your machine speed
- Is it running below set cycle time?

Quality Loss

- What is the yield?
- What are the defects coming out of the machine?

OEE

Six Big Losses

Unplanned Stops

Planned Stops



Small Stops

Reduced speed or slow cycles



Production Rejects

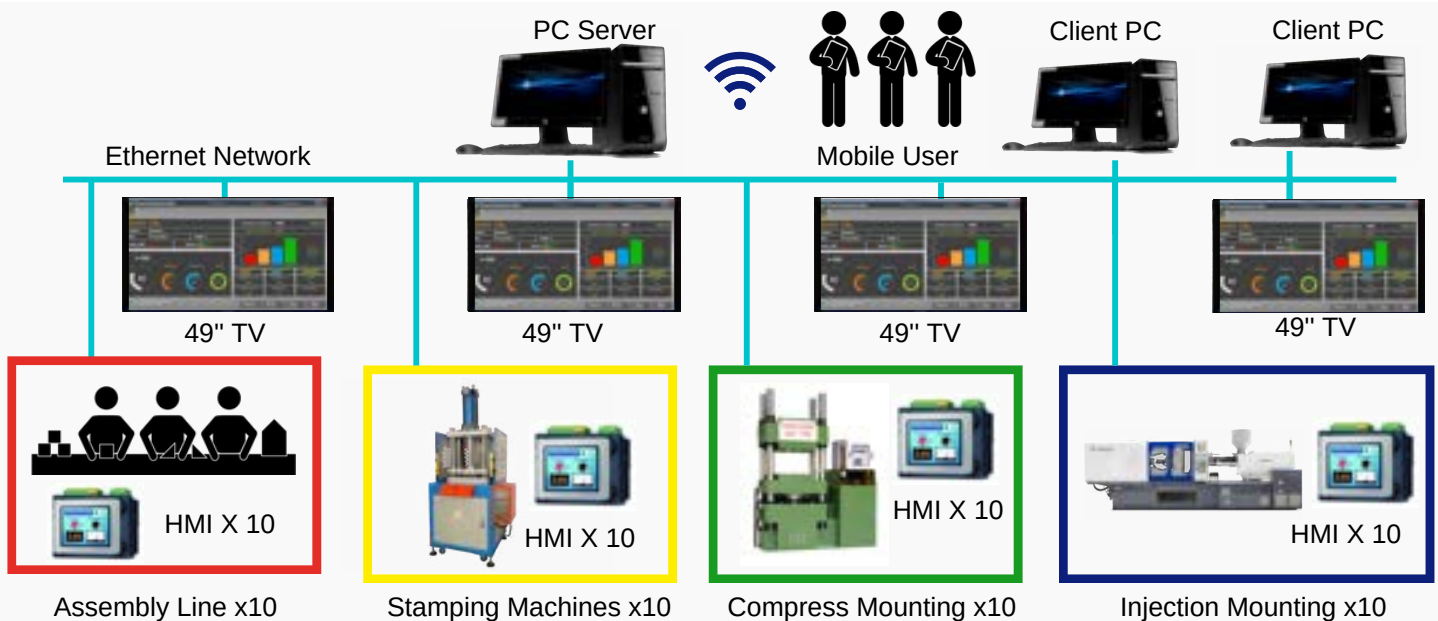
Startup Rejects



Fully Productive Time



OVERALL ARCHITECTURE OF PRODUCTION MONITORING SYSTEM USING HMI/PLC/CUSTOMISED SOFTWARE



FEATURES AND FUNCTIONALITIES OF SMART FACTORY SOLUTION:

- Live View of Shop-floor
- Task Manager
- Secure access as per the roles and responsibilities
- Tool Setup Option
- Digital Work Instruction by ballooning drawing
- First-off Inspection Approval
- Operator Dashboard
- Escalation Matrix- System Alarms for accounting losses
- Shift hand-over notes
- Live dashboard
- Live Machine Performance
- OEE trend
- Availability trend
- Productivity trend
- Quality trend
- Live Production Report
- Live losses for downtime
- Live Productivity Report
- Operator Performance Report
- Overall OEE
- Advance documentation in a centralized platform



BENEFITS OF SMART FACTORY SOLUTION

- Improve productivity, transparency and capacity utilization. The transparency of the system allows you to acutely understand issues by getting real-time information.
- Production increases by making better decisions driven by data, enabling better, real-time communication between management and the shop floor.
- Real-time production level notifications
- Live feedback of employee/operator performance.
- Eliminates manual data input.
- Improve on-time delivery.



Productivity Improvement



Process Visualisation



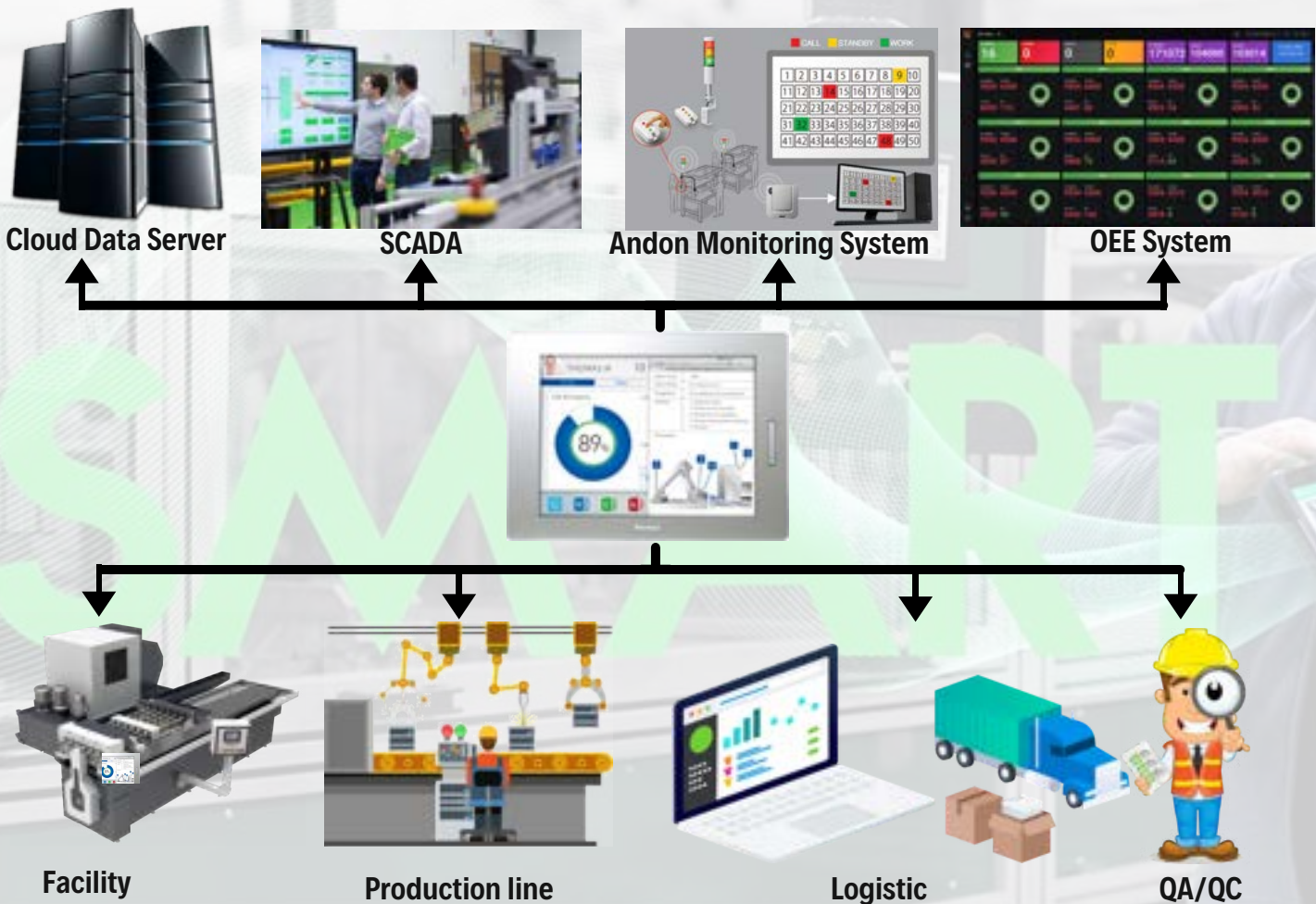
Visualize Lost Time in Cell Production

SMART



Pro-face
by Schneider Electric

PROFACE HUMAN MACHINE INTERFACE



Human Machine Interface (HMI)



✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



Pro-face
by Schneider Electric

PROFACE HUMAN MACHINE INTERFACE

ST6000 SERIES – ACHIEVE A HIGH LEVEL OF VISUALIZATION WITH THE NEW BASIC HMI



BLUE Versatile Software



10" Wide (WSVGA) 7" Wide (WVGA) 4" Wide (WQVGA) 12" Wide (WXGA) 15" Wide (FWXGA)

Revolution new software

BLUE will offer an alternative experience in hardware design. Anyone can easily create and change dynamic screens allowed for gesture operation. BLUE will provide a ground-breaking versatile design style. Features :-



Aluminum Front Panel



16 Million Colors



Better Graphics and Font *only BLUE



Easy Customization



Color Set and Cover *only BLUE



Multi-screen *only BLUE



Assist HMI Screen creation *only BLUE



Responsive Behavior (Dock Panel) *only BLUE



Easy Installation



Pro-face connectivity *only BLUE



Easy Access to User Manual



Easy Migration *only GP-Pro EX



Secure remote access solution



✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



Pro-face
by Schneider Electric

PROFACE HUMAN MACHINE INTERFACE

BLUE Line Management Lite SCADA **Open Studio**



Pro-face BLUE Open Studio is a development and runtime software that incorporates all of the tools users need to create SCADA HMI applications, dashboards and OEE interfaces.



Basic Features

Scripting	Animation	Recipes	Email (SMTP)
Security	Database	Multi-touch	FTP
Symbols	Events	Reports	Historical Performance
Tags Database	Graphic and Design Tools	Scalable	PDF Export
Troubleshooting	Trends	Scheduler	SSL Support for Emails
Gestures	Multi-Language	OPC	OEE Client
Alarms	ActiveX and .NET	Intellectual Property Protection	Custom Widgets



Remote Access



FDA 21 CFR PART 11



Database/OPC



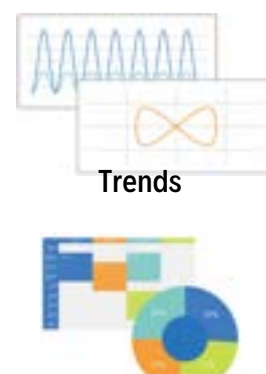
Connectivity

- 250+ available communication drivers for PLCs and many other devices.
- Native OPC interfaces such as OPC UA/DA
- Active X and .Net controls
- Support upper connectivity to DB through MQTT.



Historian

- BLUE Open Studio includes support for saving historical data from some task worksheets to a Historian database or AVEVA Insight.



Trends

Custom Widget

- Custom Widgets provides the ability to integrate third-party web-based controls into the HMI/SCADA project screens.

✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



Pro-face
by Schneider Electric

PROFACE HUMAN MACHINE INTERFACE

PS5000 Series – Industrial PC



MODULAR TYPE



Consisting of the Box and the Display module in a range of sizes from 12 to the ultra-large 22 inches. Flexibly change the functions and sizes.

Display Size:

22" Wide 19" Wide 15" Wide 12" Wide 15" 12" Box

CPU Size:

Core i7 Celeron Atom

SLIM TYPE



Panel-integrated type – drastically slimmer profile with less wasted space and high performance retained featuring optimized design for equipment that requires space-saving.

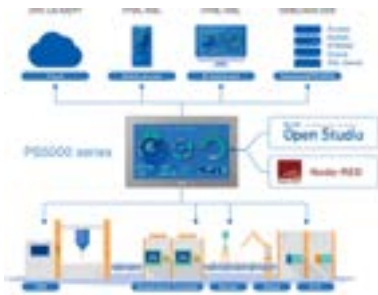
Display Size:

19" Wide 15" Wide 12" Wide

CPU Size:

Core i7 Atom

Basic Features



Connectivity



Variety of interface



Remote debugging for reduced labor at start-up



Reliability
Cybersecurity



Remote System Status
Monitoring and Control



Compatible panel
cut out



Intuitively operable
multi-touch display



High-quality glass face
offering ease of use and
visibility

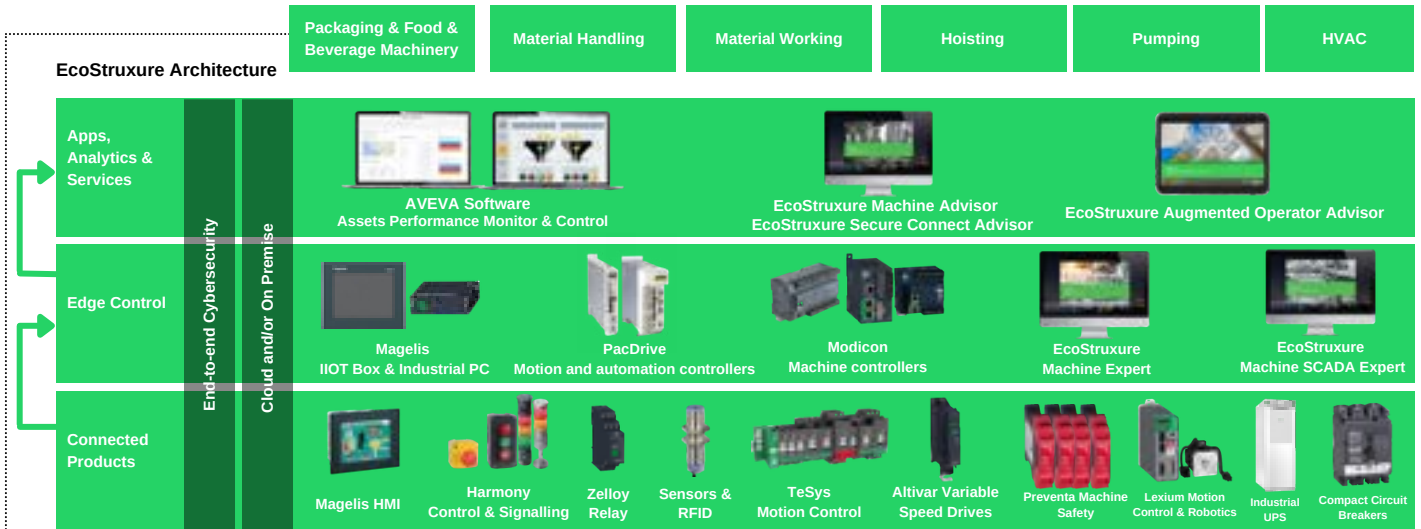
✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my

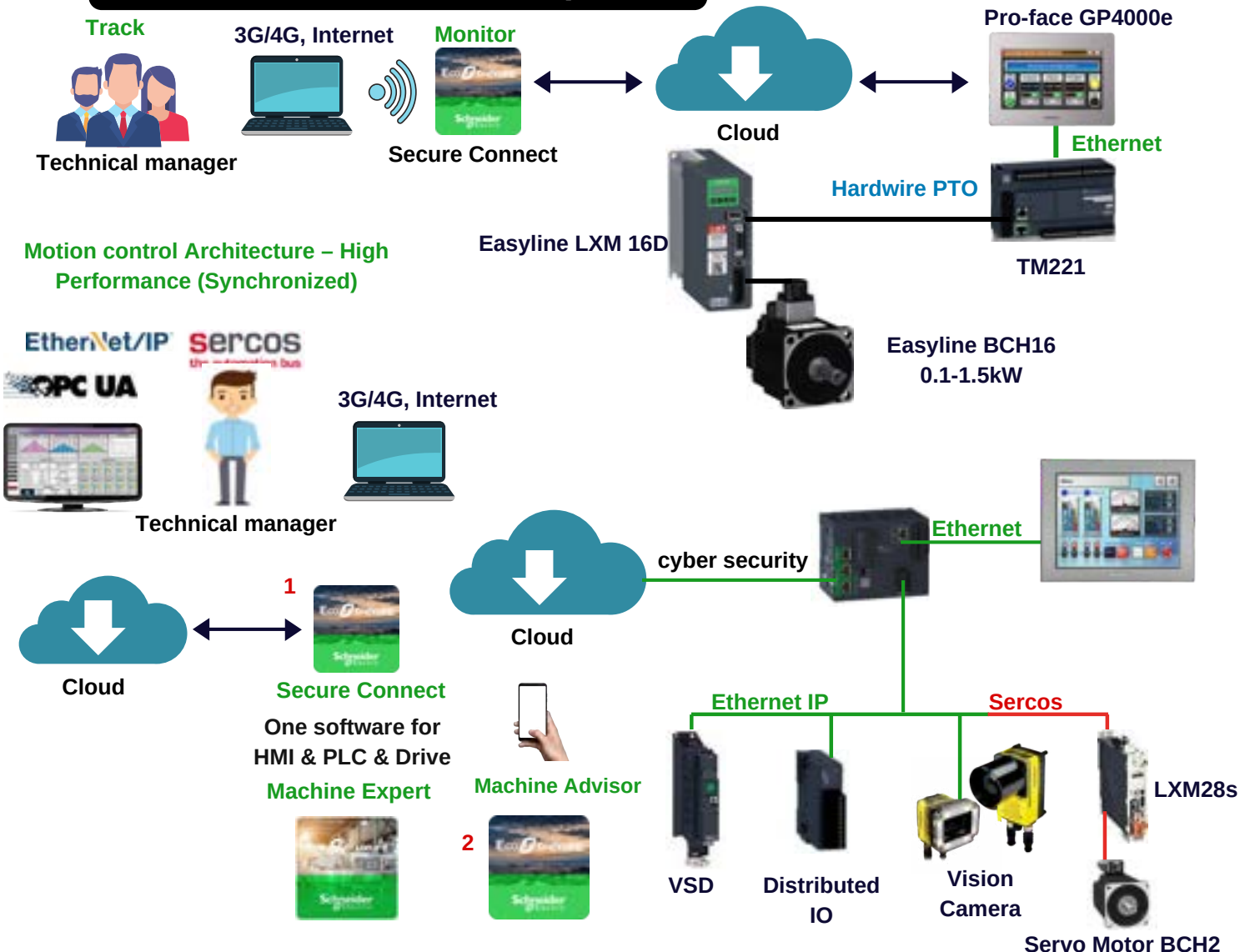


SCHNEIDER ELECTRIC FACTORY AUTOMATION SOLUTION



Motion control Architecture – Optimized

Cost Optimization with IIOT service



✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



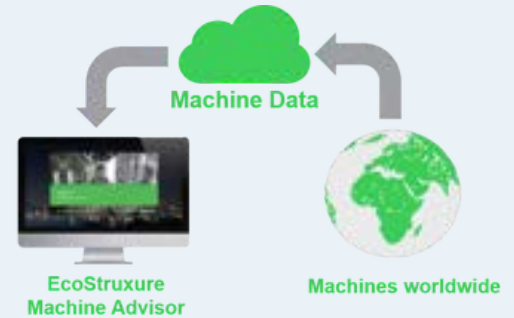
SMART

SCHNEIDER ELECTRIC FACTORY AUTOMATION SOLUTION

Smart services

EcoStruxure Machine Advisor

- EcoStruxure Machine Advisor is the new digital cloud-based services platform.
- It enables machine builders to provide new services to machine operators for each installed machine in any production site worldwide.



EcoStruxure Machine Advisor – Overview



Track

Track is a repository service to get access to the machine's documentation and history: e.g. bill of materials, manuals, maintenance log, and task management



Monitor

Monitor is a cloud-based service to get access to machine data e.g. OEE, performance, availability, and quality dashboards



Fix

Use EcoStruxure Software in the cloud to fix machine issues

Controllers for Industrial Machines



Modicon M221
For hardwired architectures
The best performance for its size



Modicon M241/M251
For simple motion control and distributed machines
Achieve benchmark performance



Modicon M262
IIoT ready controller for Logic & Motion machines
High performance & flexibility!

Servo Drives & Motors



Lexium 16
Servo drives and servo motors up to 1.5 kW
Flexible for a variety of applications

- Entry level Motion Control
- Features 6 references for servo drives for the right choice of product application
- With 16 references of servo motors to tailor for your specific needs



Lexium 26
Servo drives and servo motors up to 7.5 kW
Optimized for simple motion control applications

- Ideal use in limited space
- Essential functions with no compromise on quality
- Anti-vibration function for suppression of resonance frequencies



Lexium 28
Servo drives with embedded safety and motor servo up to 4.5kW
Optimized for compact machines



Lexium 32
Servo drives and servo motors up to 11 kW
Flexible with embedded safety for a variety of applications

- Independent to synchronized motion solution
- Powerful control loop

Altivar Variable Speed Drives



**Simple Machines
Easy Altivar 310**
Compact Format
0.37...11kW
400V



**HVAC
ATV 212**
Compact Format
0...75kW
200...400V



**General Purpose
Easy Altivar 610**
IP21
0.75...160kW
400V

✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



HMI FEATURES

INSTALLMENT



HMI RECIPE



USER PERMISSION MANAGEMENT



MULTI-LANGUAGE DISPLAY



DEVICE MANAGEMENT



ALARM NOTIFICATION



REMOTE MONITORING



SYSTEM INTEGRATION



PI8150ig HMI



FEATURES

Main Features:

- CPU A35 1.2GHz, 4G Flash, 512MB DDRAM.
- Display: 15 inches; Resolution: 1920*1080; Display color: 260k colors.
- Interface: a physical serial port. COM1: RS232, RS422 or RS485 (choose one of two), RS485.
- USB interfaces: USB Host/USB Client.
- remote monitoring and serial port download supported.
- 8150ig-C supports related functions of V+NET, Ethernetpass-through download and sync data to cloud.

BIG SCREEN



FAST



ALLUMINIUM ALLOY PANEL



UNIQUE



4-CORE CPU



NUMEROUS



COMPLETE IOT FUNCTION



RELIABLE



SMART HOME



SMART BREEDING



VEHICLE



SMART FACTORY



SECURITY

✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



PI3070ig HMI



Main Features:

- CPU A35 1.2GHz, 128M Flash, 128M DDRAM
- Display: 7 inches; Resolution: 800*480; Display color: 16,000k colors
- Interfaces: a serial port. COM1: RS232, RS422 or RS485(choose one of two), RS485.
- USB interfaces: USB Host/USB Client
- Remote monitoring and WVPN pass-through download.
- 3070ig-C supports related functions of V-NET, Ethernet pass-through download and sync data to cloud.

Model	COM	Ethernet	Monitoring	Alarm	Data Record	Validity	WIFI / 4G	Pass-through	Script
PI3070ig	3 in 1	1	NA	NA	NA	NA	NA	WVPN	YES
PI3070ig (4G)	3 in 1	1	NA	NA	NA	NA	4G	WVPN	YES
PI3070ig (WIFI)	3 in 1	1	NA	NA	NA	NA	WIFI	WVPN	YES
PI3070ig-C	3 in 1	1	100	20	50	60 days / 1 millions	NA	WVPN	YES
PI3070ig-C(4G)	3 in 1	1	100	20	50	60 days / 1 millions	4G	WVPN	YES
PI3070ig-C(WIFI)	3 in 1	1	100	20	50	60 days / 1 millions	WIFI	WVPN	YES

PI3102ig HMI



Main Features:

- CPU A35 1.2GHz, 128M Flash, 128M DDRAM
- Display: 10.2 inches; Resolution: 1024*600; Display color: 16,000k colors
- Interface: a physical serial port. COM1: RS232, RS422 or RS485(choose one of two), RS485.
- USB interfaces: USB Host/USB Client
- remote monitoring and serial port download supported
- 3102ig-C supports related functions of V+NET, Ethernet pass-through download and sync data to cloud

Model	COM	Ethernet	Monitoring	Alarm	Data Record	Validity	WIFI / 4G	Pass-through	Script
PI3102ig	3 in 1	1	NA	NA	NA	NA	NA	WVPN	YES
PI3102ig (4G)	3 in 1	1	NA	NA	NA	NA	4G	WVPN	YES
PI3102ig (WIFI)	3 in 1	1	NA	NA	NA	NA	WIFI	WVPN	YES
PI3102ig-C	3 in 1	1	100	20	50	60 days / 1 millions	NA	WVPN	YES
PI3102ig-C(4G)	3 in 1	1	100	20	50	60 days / 1 millions	4G	WVPN	YES
PI3102ig-C(WIFI)	3 in 1	1	100	20	50	60 days / 1 millions	WIFI	WVPN	YES



Remote Operation--All Under Control

WECON V-BOX and PI3000ig series IoT HMI transmit the data obtained from mechanical equipment to WECON V-NET. No matter how many devices there are, you can bring them all in one platform. By using the V-NET APP, you can easily get Unattended Operation, Device Management, Remote Commissioning and Data Connectivity.

Device Management



Data Connectivity



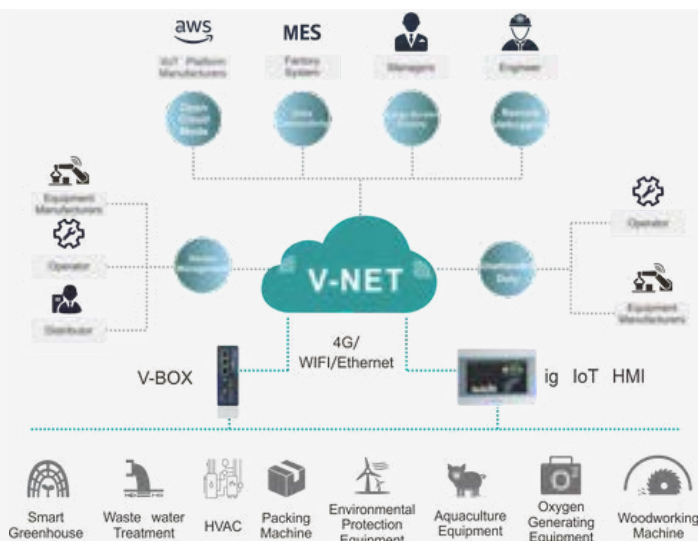
Unattended Duty



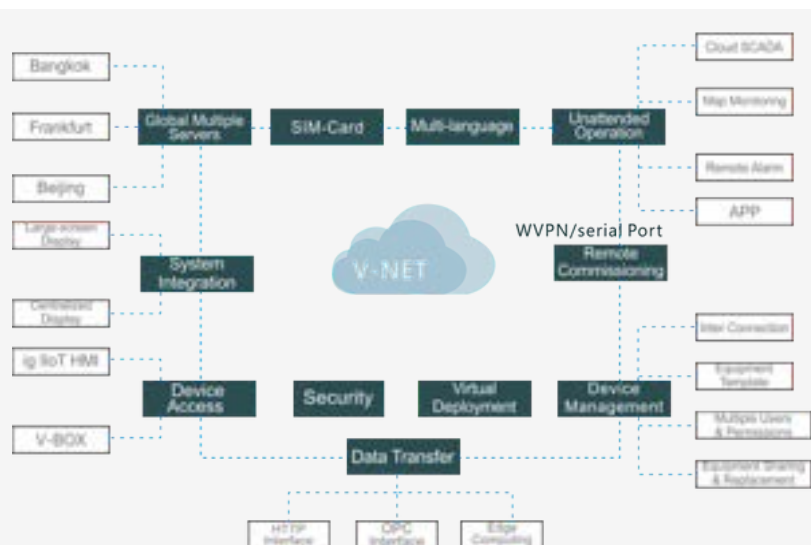
Remote Commissioning



System Integration : Large Screen Display, Interconnection Between Devices



WECON V-NET Gateway Architecture



WECON V-NET Gateway Functions



V-BOX H SERIES

Main Features:



V-BOX is a device for use in remote debugging, web scada, API interface, app monitoring.

- Get data via RS-232 / RS-485 / Ethernet communication, offer Modbus RTU / Modbus TCP communication.
- Supports communication protocols of the main brands of PLC, frequency inverters, network analyzers, among others.
- Connects to the cloud platform through Ethernet, Wifi, 4G connectivity.
- Remote monitoring with upload and download option of PLC programming (Wecon).
- Offers WVPN for remote connection to different PLC brands.
- OPC access.
- Development of Scada in the cloud.
- Datalogger and download of data, alarms and history directly to Excel.
- Access available from mobile devices through the V-Box app (Android / IOS)

Model	COM	Ethernet	Monitoring	Alarm	Data Record	Validity	WiFi	Pass-through	Script
V-BOX H-4G	4 in 3	3	200	200	30	90 days / 1 millions	4G	serial - wvpn	Yes
V-BOX H-4G	4 in 3	3	500	300	100	180 days / 1 millions	4G	serial - wvpn	Yes
V-BOX H-4G (global)	4 in 3	3	100	100	100	180 days / 1 millions	4G	serial - wvpn	Yes
V-BOX H-WF	4 in 3	3	100	200	50	90 days / 1 millions	WiFi	serial - wvpn	Yes

V-BOX E SERIES

Main Features:



V-BOX is a device for use in remote debugging, web scada, API interface, app monitoring.

- Get data via RS-232 / RS-485 / Ethernet communication, offer Modbus RTU / Modbus TCP communication.
- Supports communication protocols of the main brands of PLC, frequency inverters, network analyzers, among others.
- Connects to the cloud platform through Ethernet, 4G connectivity.
- Remote monitoring with upload and download option of PLC programming (Wecon).
- Offers WVPN for remote connection to different PLC brands.
- OPC access.
- Development of Scada in the cloud.
- Datalogger and download of data, alarms and history directly to Excel.
- Access available from mobile devices through the V-Box app (Android / IOS)

Model	COM	Ethernet	Monitoring	Alarm	Data Record	Validity	WiFi	Pass-through	Script
V-BOX E-00	2 in 1	1	200	50	20	90 days / 100 millions	Na	Serial	Na
V-BOX E-4G	2 in 1	1	250	100	50	90 days / 100 millions	4G	Serial	Yes



PLC series



LX3V



LX5V Ethernet Series



LX5S Series

- High speed pulse input and output
- Support encoder (AB phase)
- Up to 200K pulse signal
- Power-down save
- Program encryption protection

- 8-axis high speed pulse input and output
- The basic execution speed is 0.01us ~0.03us
- 8 external X interrupt supported (both rising and falling)
- (High baud rate)921600bps
- 100us high-speed timing interrupt
- Maximum 100 high-speed counting interrupts



LX6V 0808MT

- Supports EtherCAT and USB TYPE-C
- Support IEC61131-3 LD programming mode, free-tag protocol, faster and more efficient communication
- 5MB large program capacity
- 512KB latched capacity
- 100KB register capacity
- 5MB free tag capacity

Servo Series



VD3E Series



VD2 Series



VD2F Series



Servo Motor

- **Cooling ensured** – Integrated body design, better cooling system, better protection.
- **Small size** – The split encoder is adopted to significantly reduce the size of the motor.
- **High working temperature** – N38SH grade magnetic steel can work as 150 C Degree. H grade enamel insulated wire is used and the insulation temperature is up to 180 C degree.
- **Good components** – Raw materials of international brand is used and high quality, certificated trade companies are supplied to ensure the quality and stability of products.



ONLINE CONDITION MONITORING SYSTEMS



Data Collector RH 560



Wireless vibration and temperature RH505



Wireless tri-axial vibration and temperature sensor RH605

WIRED CONDITION MONITORING SYSTEMS



Data Collector RH 1000



RH113 Accelerometer



RH103 Accelerometer

MOS3000 SOFTWARE



- Webpage, can view machine condition anytime, anywhere. Tree structure, Easy to check by administrators
- SMS/Email A, learn condition anywhere
- Intelligent Machinery Condition Monitoring Solution. Intelligent alarm and response system.

APPLICATION



VIBRATION
MONITORING



MINING
INDUSTRY



CONDITION
BASED MONITORING

✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



PORTABLE VIBRATION ANALYSER

FEATURES

- Touch Screen
- Route measurements downloaded from PC software
- Waveform/spectrum analysis and alarm remind
- Manual input function
- Infrared temperature measurement
- Set equipment status
- Multi-communication method with server: Wi-Fi or USB
- Camera function
- Professional PC analysis software
- Explosion proof version is available and optional
- CE marking available



**Route measurements
downloaded from PC software**



**Waveform/spectrum analysis and
alarm remind**



Infrared temperature measurement

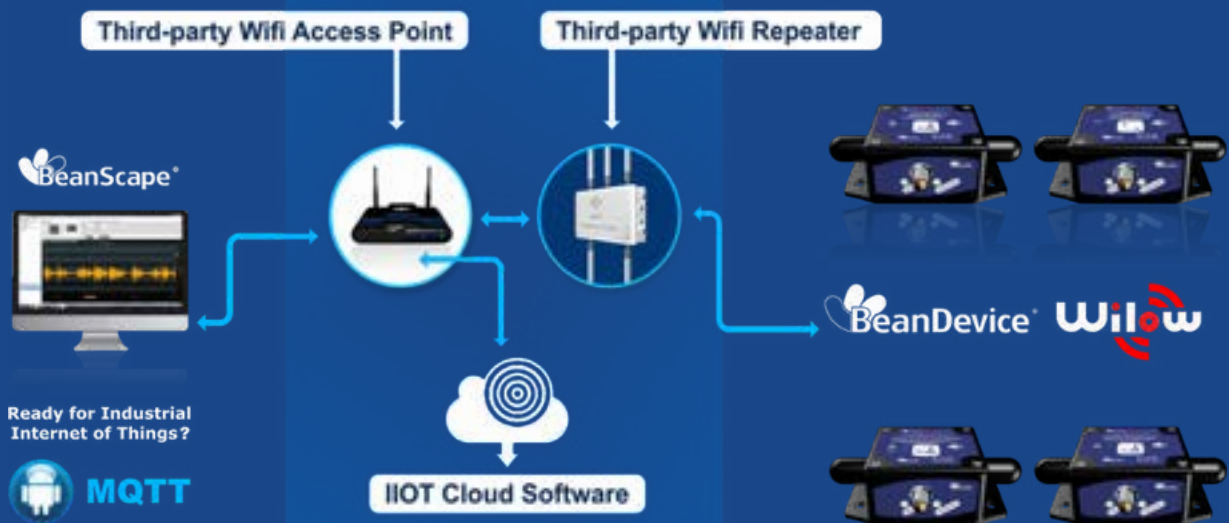


Professional PC analysis software



BeanAir

RETHINKING RESENSING TECHNOLOGY



SENSOR MEASUREMENT

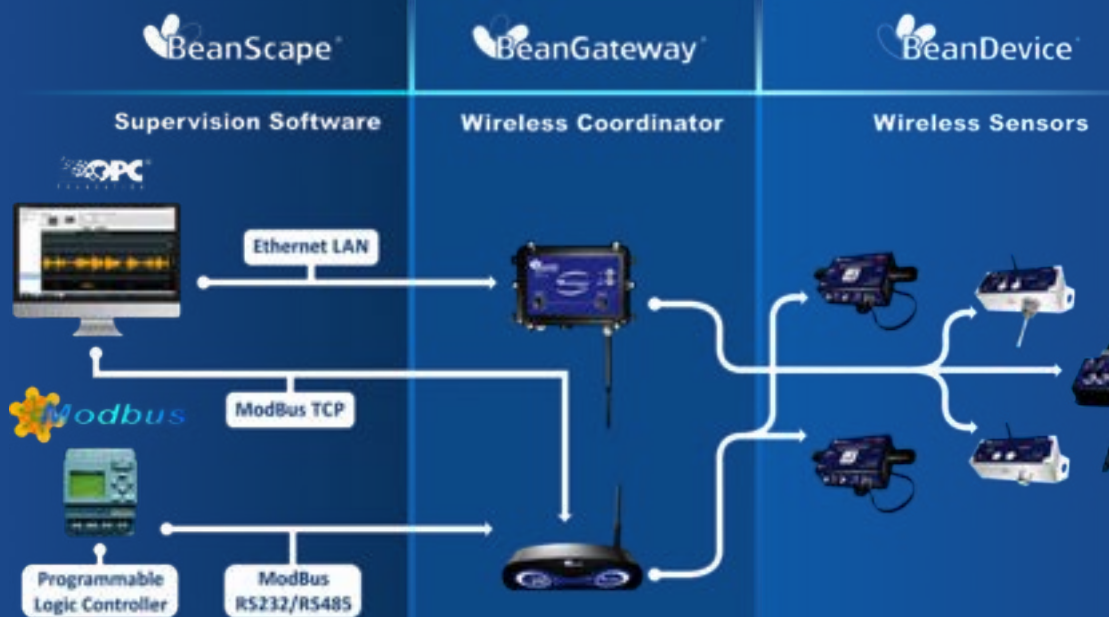
VIBRATION

INCLINATION / TILT

HUMIDITY

SHOCK

TEMPERATURE



**Land
Surveying**



**Structural Health
Monitoring**



**Test and
Measurement**



**Ground Vibration
Monitoring**



**Environmental
Monitoring**



**Condition
Monitoring**

✉ **EMAIL**
info@scigate.com.my

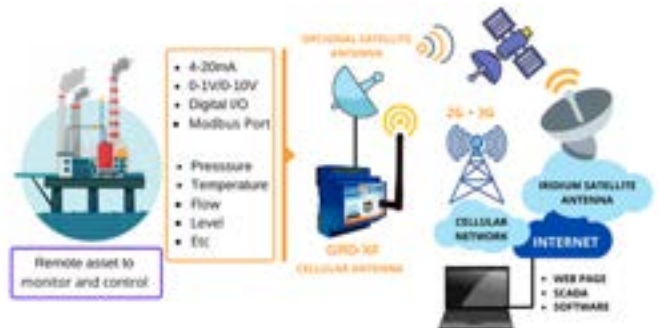
☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



ZIGBEE WIRELESS TELEMETRY SYSTEM 2.4GHZ

Telemetry and Connectivity



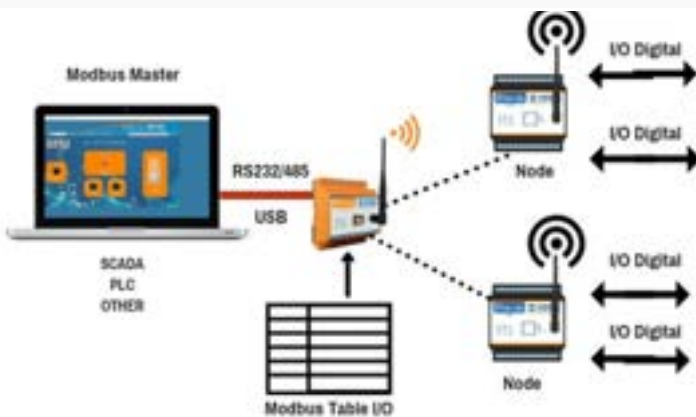
GRD-3G Family

Telemetry Device with 3G+2G Cellular / Satellite communication and Programmable Logic

- Using the GRD-3G allows for remote monitoring and control of sensors, transducers, and intelligent devices from your own control system or through our Web Server for Telemetry applications.
- Remote Serial Port (Modbus or wireless)
- Modbus Master protocol in port RS232/485 for I/O expansion

- Modbus Slave protocol for local access to I/O
- Logic programming with Scripts
- Alarms and capability to control by SMS text messages
- Record Logs Automatic reconnection by shear link
- Display of data through:

1. SCADA Software
2. Your own software
3. Exemys provided web page



Wireless Inputs/Outputs using MODBUS protocol

This solution allows us to connect Modbus devices to the remote nodes with the RS232 or RS485 ports and access them through the concentrator.

Specification:

RF Wireless Protocol: IEEE 802.15.4
 Frequency: 2.4000 to 2.4835 Ghz
 Free Band Channels: 16
 Separation between channels: 5 MHz

Wireless access to MODBUS slave

This solution allows us to monitor the physical inputs/outputs of the nodes, by reading the internal Modbus slave on the concentrator

Specification:

Antenna: 2dBi Connector RP-SMA
 Scope: 2Km between nodes, with antenna of 2dBi and line of sight
 Mesh Network – Amount of Nodes: Up to 50 max.
 Mesh Network – Repetition between nodes: Up to 4



LIQUID & SOLIDS LEVEL TRANSMITTERS/SWITCHES

Reflective Ultrasonic Sensors



General purpose



Intrinsically safe

Application

Day tank, skid or machine, cooling tower, IBC or drum, process tank, small waste sump

Bulk storage, neutralization tank, clarifier, large waste sump

Range

9.8' (3m)

39.3' (12m)

Pulse Radar Sensors



General purpose



Intrinsically safe



Dry Bulk Solids

Application

Process

Process

Crusher, transfer station, stockpile, silo, bin

Range

114.8' (35m)

114.8' (35m)

229.7' (70m)

Ultrasonic Sensors



General purpose



General purpose

Application

Chemical feed, skid or machine, IBC or drum

Bulk storage, day tank, waste sump

Range

49.2" (1.25m)

32.8' (10m)

Guided Wave Sensors



General purpose



General purpose



General purpose

Application

Day tank, skid or machine, IBC or drum, process tank, waste sump

Day tank, skid or machine, IBC or drum, process tank, waste sump

Bulk storage

Range

9.8' (3m)

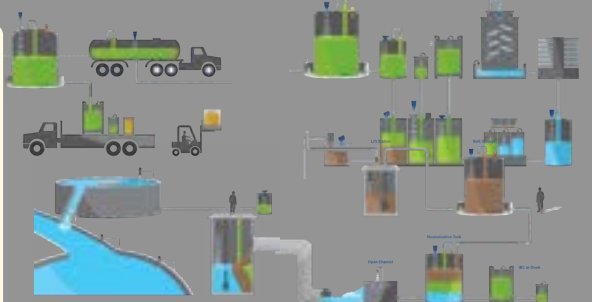
9.8' (3m)

18' (5.5m)

Chemical Distribution

Industrial Manufacturing

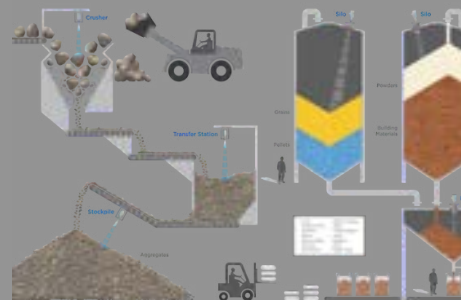
Liquid Level Map



Municipal Wastewater

Industrial Wastewater

Solids Level Map



EMAIL
info@scigate.com.my

TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

WEBSITE
scigate.com.my



KANSAI
Automation

LIQUID & SOLIDS LEVEL TRANSMITTERS/SWITCHES

Level Switches



KF-805N Multi-point
Ball Type Float Switch

KF-207 Standard
Flange Type

KF-32 Small-
caliber Type

KF-500 Flange Type •
Detection Pipe Type

KF-650 Remote
construction

Suitable to control the
supply and drainage
pump, the motor and the
solenoid valve

Various flange
regulations are
available

Suitable for liquid
level measurement

Applicable to high
viscous liquid

Suitable for liquid
level measurement

Level Transmitters for liquid and powder



NL-8B Standard
Flange Type

NL-15B Withstand
Load Type

LS Standard Type

SWM-8B Standard
Flange Type

SWM-8BA Adjustable
Shaft Type

Basic model of
rotary paddle level
switch.

Suitable for low level
detection inside the
big tank

Basic model of small
rotary paddle level
switch

Standard model of
swing level switch

Suitable for the
application length
adjustment

Level / Flow Switch for Powder/Granules



KLI Amplifier
Remote Type

KSL-T8 CPU Built-
in Model

KF-100 Stainless
Type

KF-130PVC Type

B1 Standard Type,
Straight Electrode

Stable
measurement even
while charging

Measuring tape
material is stainless
steel.

Applicable to water,
oil, general liquid
etc

Suitable for
corrosive liquid
measurement

It measures the capacitance
variations between the main
electrode and the tank wall

✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



OLCM SYSTEMS
Solutions in Load Cell Technology

**SOLUTION IN LOAD CELL AND
WEIGHING TECHNOLOGY**

LOAD CELLS



Compression Load Cells



Beam Load Cells



Wireless Load Cells



Load Shackles



**Tension &
Compression Load Cells**



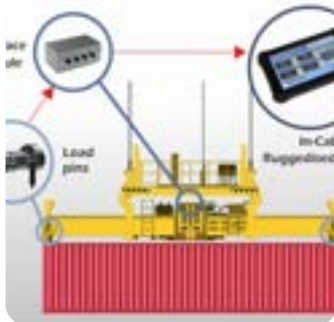
Tension Load Cells



Load Pins



Load links



**Container Weighing
Systems**



ATEX Load Cells



ATEX Load Shackles



ATEX Load links

INSTRUMENTS



Hand Held Indicators



Digital Indicators

APPLICATION

- Crane Overload
- Mooring
- Anchor Winch
- Bridge Structural Monitoring
- Crane Hoist
- Jack Up Vessel Load Monitoring
- Shore Side Crane
- Cable Tension Monitoring

✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

FUTEK ADVANCED SENSOR TECHNOLOGY



Pancake



In-line Series



Miniature Load Button

Load Cell



S-Beam Jr



Bending Beam



Through-Hole Donut

Torque Sensors



Reaction Torque
Sensor



Rotary Torque
Sensor



Miniature Screw
Driver



Miniature Pressure
Sensor



Pressure Sensor
(OEM)

Pressure Sensor

Multi Axis Load Cell



Tri-Axial Load Cell



Torque and Thrust



Handheld Display



USB Solutions



Universal Amplifier



Panel Mount

Instruments

Load Cell Application



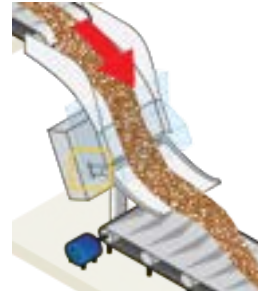
Medical Bag
Weighing



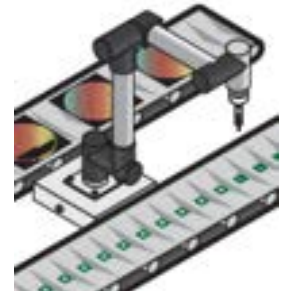
Wire Tension
Measurement



Automation filling
container



Mass Flow Meter



Fluid-flow rate
measurement

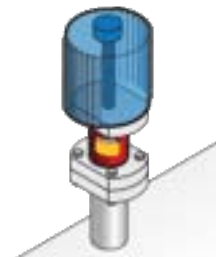
Torque Sensor Application



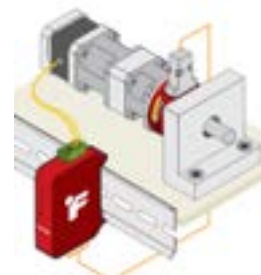
Motor Test Stand



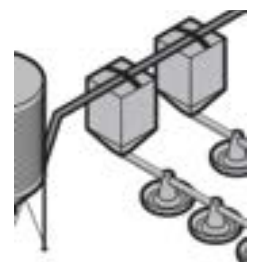
Nut Runner Force
Sensor



Valve Torque
Testing



Servo Motor Torque Control



Agriculture Poultry
Feeder

✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



PAVONE SYSTEMS

**ENSURING THE BEST ACCURACY
FOR EVERY MEASUREMENT**

Load Cells + Accessories

Shear Beam



65023

Compression



PS24



SBR



CC3

Double Shear Beam



DDR

Bending Beam



BBR

UWT 6008



SMART
JUNCTION BOX

DAT 1400



Weight Transmitter

MCT 1302



Weight Indicator



Platform Scale



Single Cell



Weighing Beam

Junction Box



TESTER 1008



Load Cell



Smart Junction Box



Mounting Kit



MKX



DE



MH



LOAD FOOT

✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



PAVONESYSTEMS

**ENSURING THE BEST ACCURACY
FOR EVERY MEASUREMENT**

PAVONE SISTEMI APPLICATION



✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



OUR PRESSURE SENSORS ARE DESIGNED WITH CUSTOMIZATION IN MIND

Our pressure sensors are designed with customization in mind and they are flexibly configured to fix the needs of every application.



Piezoresistive OEM Measuring Cell



Pressure Transmitter



Temperature Transmitter



Pressure & Temperature Transmitter



Pressure Switch



Liquid Level Transmitter



Level & Temperature Transmitter



Hydrostatic Level Logger & Water Management



PROFILOMETERS FOR THE ANALYSIS OF SURFACE TEXTURES AND FORMS

Surtronic S-100 Series



- Advanced parameter options to suit your application
- USB Connectivity for charging, USB stick storage or printing
- Measure any surface, any height with the included stylus lift
- Anti-slip V-feet mean the system can be used on flat or curved surfaces
- Built to last, by design – Impact resistant rubberised mouldings
- 2000 measurements from a single charge.

Surtronic Duo Surface



- **Bluetooth technology** – Quick, reliable communication between traverse and display/ control unit.
- **Profile graph** – Clear detailed graph showing measurement area – excellent for visually identifying defects.
- **Separates** – The Duo splits into a display/control unit and traverse unit via a slide and lock mechanism.

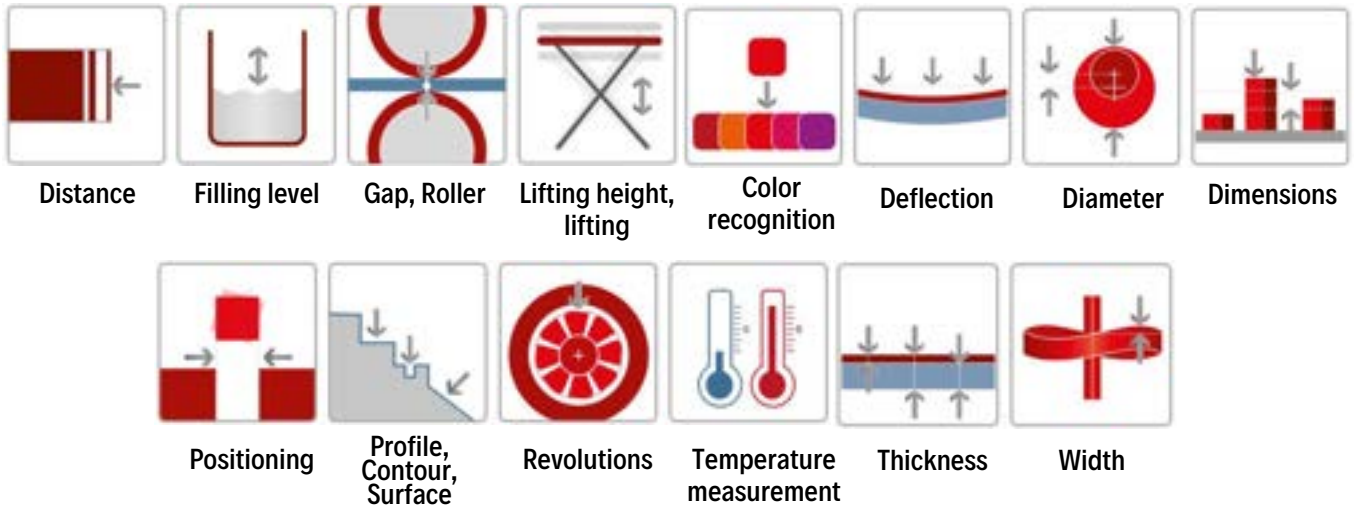
✉ **EMAIL**
info@scigate.com.my

☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my

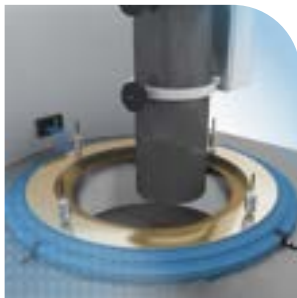


HIGH PRECISION SENSORS, MEASUREMENT DEVICES AND SYSTEMS

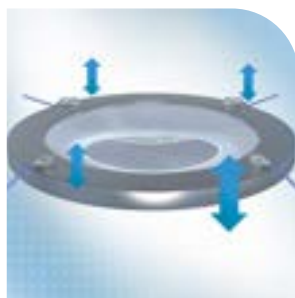


**Measurement area for
various surfaces**

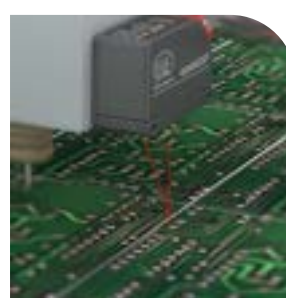
**Surface. Material. Transparent. Metal. Glowing. Shiny. Translucent. Multi
Colour. We Do have The Right Technology For you**



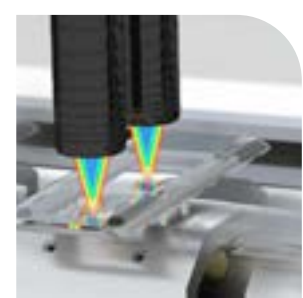
Eddy Current Sensor



Capacity Sensor



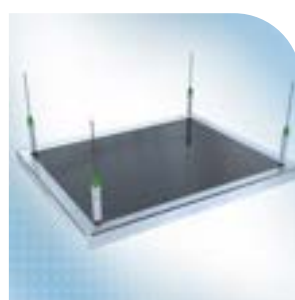
Laser Displacement Sensor



Confocal Sensor



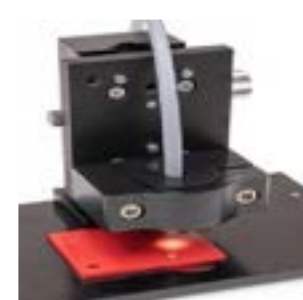
Draw Wire Sensor



Interferometer Sensor



IR Temp Sensor



Fiber Colour Sensor



Laser Projector Sensor



Thermal Imager



Thickness Sensor



Coating Thickness Sensor

✉ **EMAIL**
info@scigate.com.my

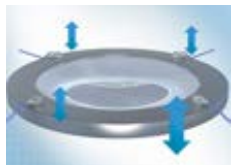
☎ **TELEPHONE**
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 **WEBSITE**
scigate.com.my



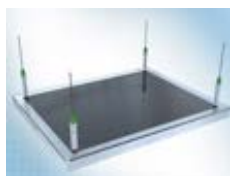
HIGH PRECISION SENSORS, MEASUREMENT DEVICES AND SYSTEMS

Advance and New Technology



Capacity Sensor

- Nano meter resolution
- Multi-channel measurement
- Thickness, distance, flatness, gap



Interferon Meter Sensor

- Nano meter resolution
- Transparent, translucent, metal,
- mirror surface
- Thickness, Distance, Flatness



Thermal Imager

- Precise Temperature Capture
- High resolution FOV for temperature
- Customize monitoring location



3D Sensor

- Fast 3D capturing
- Height resolution for x,y,z axis
- 3D data direct from sensor

Micro-Epsilon Application



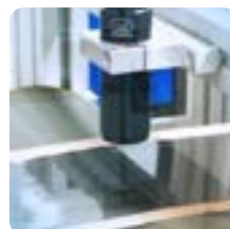
Colour Homogenous for
Car Headlight



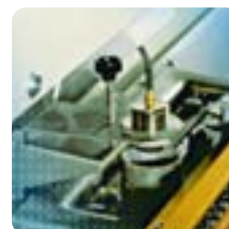
Gap Measurement for
mechanical assembly



Height/ Quality/
Area/width check for
dispensing beam



Inline
thickness/quoting
thickness



Solder Height,
process positioning
control



Glass manufac-
turing temperature
monitoring



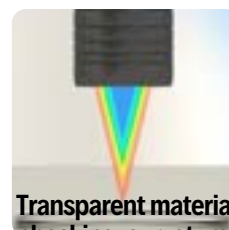
Contact lens
diameter check



Dispensing height
monitoring



Wafer: thickness,
flatness, saw mark,
bow and warp



Transparent material
checking: curvature,
thickness, multi layer
thickness

Why Choose Micro-Epsilon?



Non -Contact



Traceability



Reduce Reject Rate



Documentation



Quality Product

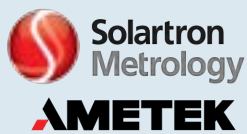


Precise and
Accurate

✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my



WORLD LEADER IN THE INNOVATION AND MANUFACTURE

Displacement Measurement Sensor



LVDT or Inductive Gauging Probe



Digital Probe and Orbit Technology

In the lab, on the shop floor or in the field, Solartron Metrology products provide precise linear measurements for quality control, test and measurement and machine control.

Digital Probe – Orbit



Orbit® ACS



Orbit® Gateway



Orbit® PC Solutions



Orbit® Digital Display



Gauging Probe



Probe Tips and Accessories



Wigauge



LVDT Displacement Sensor

Position Sensor

Analog Probe



Gauging Probe



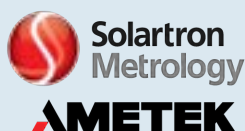
Analog Amplifier



Display Unit



Probe Tips and Accessories



WORLD LEADER IN THE INNOVATION AND MANUFACTURE

Orbit Modules and Gateways

- Flexible and easy to use
- Interface up to 150 Orbit® Digital Probes.
- Mathematical Formulae, both fixed and user programmable
- Log Data to Microsoft Excel® formatted files for further processing
- Upgrade options for Complex Formulas, Mastering and Statistical Process Control (SPC)



Orbit® 3 Network

- Calibrated Digital Sensors
- Network up to 150 sensors
- Output via USB, RS232, Ethernet, Ethernet/IP®, Profinet®, EtherCAT®, Modbus, Bluetooth, and others



Orbit® Air Gauge Interface Module (AGM)

- Calibrated Digital Sensors
- Network up to 150 sensors
- Output via USB, RS232, Ethernet, Ethernet/IP®, Profinet®, EtherCAT®, Modbus, Bluetooth, and others
- AGM works with PC / PLC interface module of Solartron Metrology



Bowers Digital Smartplug

- Custom-made size
- High Precision Digital Bore Gauge 2-points
- Can be integrated with Solartron Digital Transducer



SOFTWARE



Watch Video

APPLICATION



Flatness Check Station



ID Check of Con-Rod



Curvature and Thickness of Glass

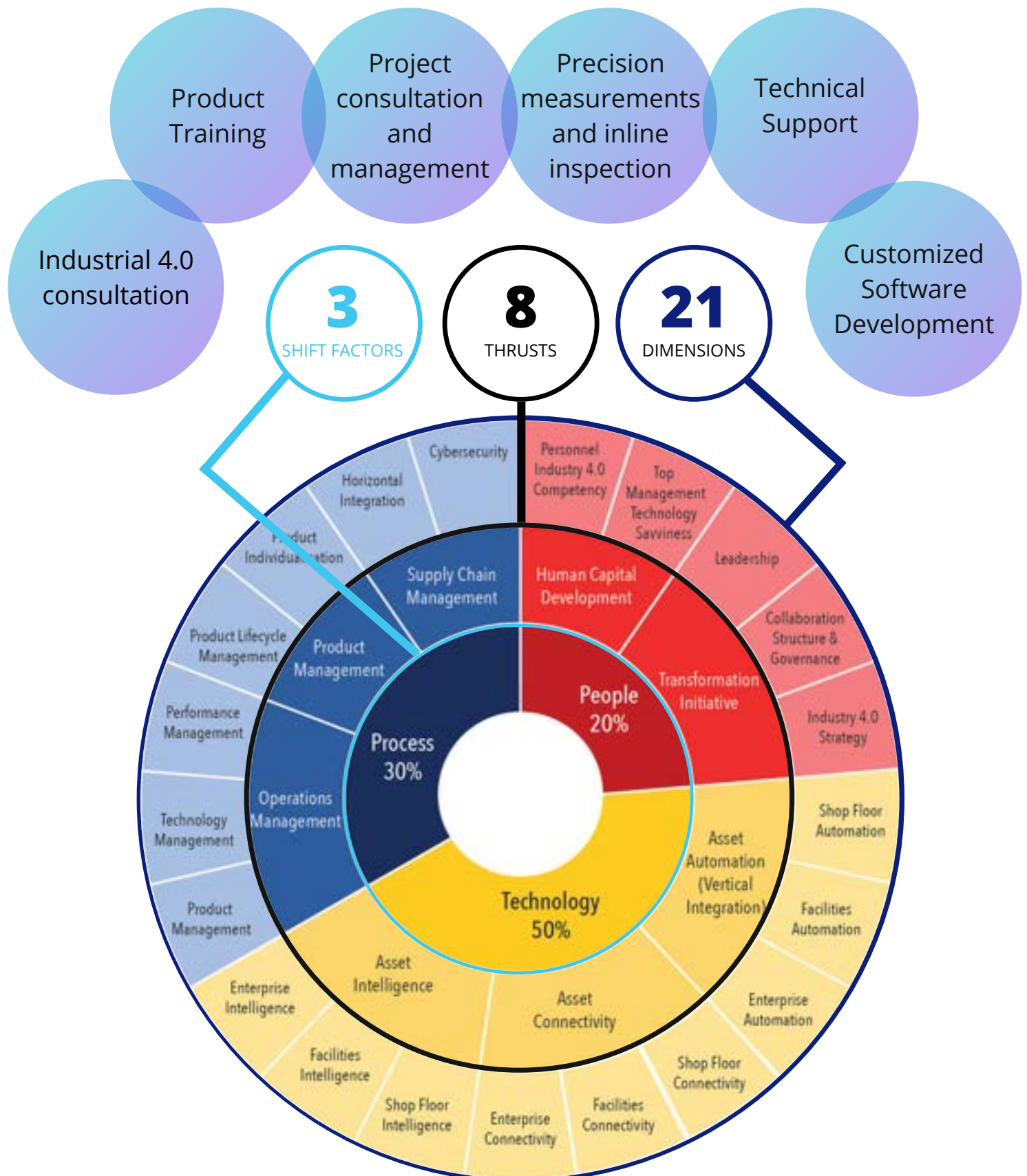
✉ EMAIL
info@scigate.com.my

☎ TELEPHONE
04-399 7522 (HQ, Penang)
03-7804 7522 (Branch, Petaling Jaya)

🌐 WEBSITE
scigate.com.my

OUR SERVICES

www.scigate.com.my



Industry4WRD Readiness Assessment-
Source by MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY



PENANG

Tel: (60) 04 3997522
Fax: (60) 04 3997509
Email: info@scigate.com.my

SELANGOR

Tel: (60) 03 78047522
Fax: (60) 03 78047422
Email: info@scigate.com.my

JOHOR

Tel: (60) 07 3519806, 07 3578806
Fax: (60) 07 3519807
Email: mktg@scigate.com.sg



Sciengate Automation Malaysia



Sciengate Automation (M) Sdn Bhd