

**We shine  
a light on  
the night race  
That's smart  
control**

When you're entrusted to light the prestigious night race in Singapore, control and reliability are paramount.

ComAp's IntelliGen<sup>NTC</sup> BaseBox and IntelIVision 8 display were used to control twenty-four 500 kVA generators powering 1500 special lighting rigs, which shined the spotlight on the world's top drivers through three nights of practice, qualifying and racing.

# The heart of smart control

**heart:**

The heart of ComAp is our staff and our customers.

**smart:**

Our products are innovative, intelligent and practical.

**control:**

What we ultimately provide our customers.

# ComAp numbers



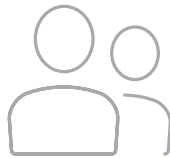
**1** Global  
Distributor Network

**8**



Subsidiaries

**25** Years of Success  
and Experience



**300+**  
Employees



**238**

Products and  
Accessories



**1** Global Headquarters  
**Prague**  
Czech Republic



**100+**  
Countries

## Going beyond our leading reputation for controllers to deliver intelligent electronic control solutions

At ComAp, we collaborate closely with you to fulfil your existing requirements, that's a given. It's our knowledge of focused markets, which we gain through unrivalled local expertise that allows us to deliver intelligent electronic control solutions that anticipate your needs.

What's more, our innovative solutions are highly flexible, intuitive and scalable, and supported by world-class customer service and technical expertise, at every stage. This we deliver through our specialist network of local experts, operating in 100 countries across the globe.

**Solutions for  
your applications  
That's smart  
control**



Telecom



Marine



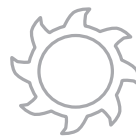
Hospitals



Agriculture



Datacenters



Mining



Rental



Industrial



Events



Construction



Power plants



Renewables



Commercial



Banks



Oil & gas



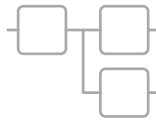
Defence



# Applications

## Prime power system

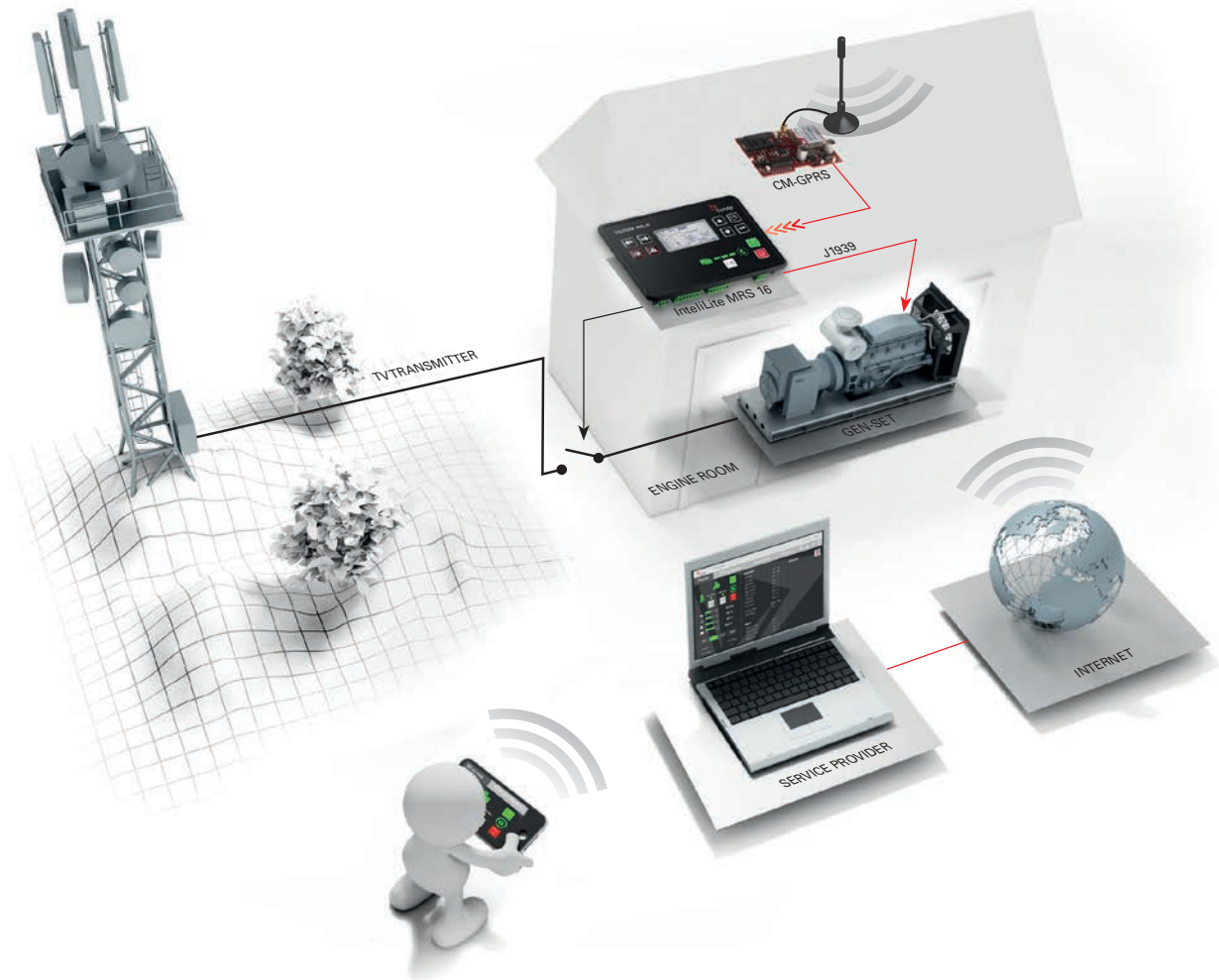
Remote monitoring via Internet



> ComAp's MRS controllers allow you to effectively operate a single gen-set, either manually on the gen-set itself, or remotely.

> New level of flexibility enabling customers to meet any application requirements.

> Get the gen-set under your watch and control it from basically anywhere using the wide range of communication capabilities that we offer - WebSupervisor, 4G, GPS, Ethernet, ModBus, SNMP, AirGate and many more.



## Byrne Equipment Rental

Byrne Equipment Rental is the largest general rental company in the Middle East. They provide equipment rental solutions to a variety of industries. Their power generation equipment has been fitted with IntelLite<sup>NT</sup> MRS 15 and IL-NT GPRS communication modules, enabling remote communications to be used across the fleet. The use of WebSupervisor and LOCATE technology allows Byrne to monitor and manage this large fleet remotely and accurately.

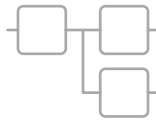
"It is a cost effective and easy to use tool for monitoring our machines online, anytime. The history also provides valuable information for our service teams, helping us cut many extra costs, and lowering downtime."

Nahidh Kashmoula, Technical Manager, Byrne Equipment Rental



## Standby system

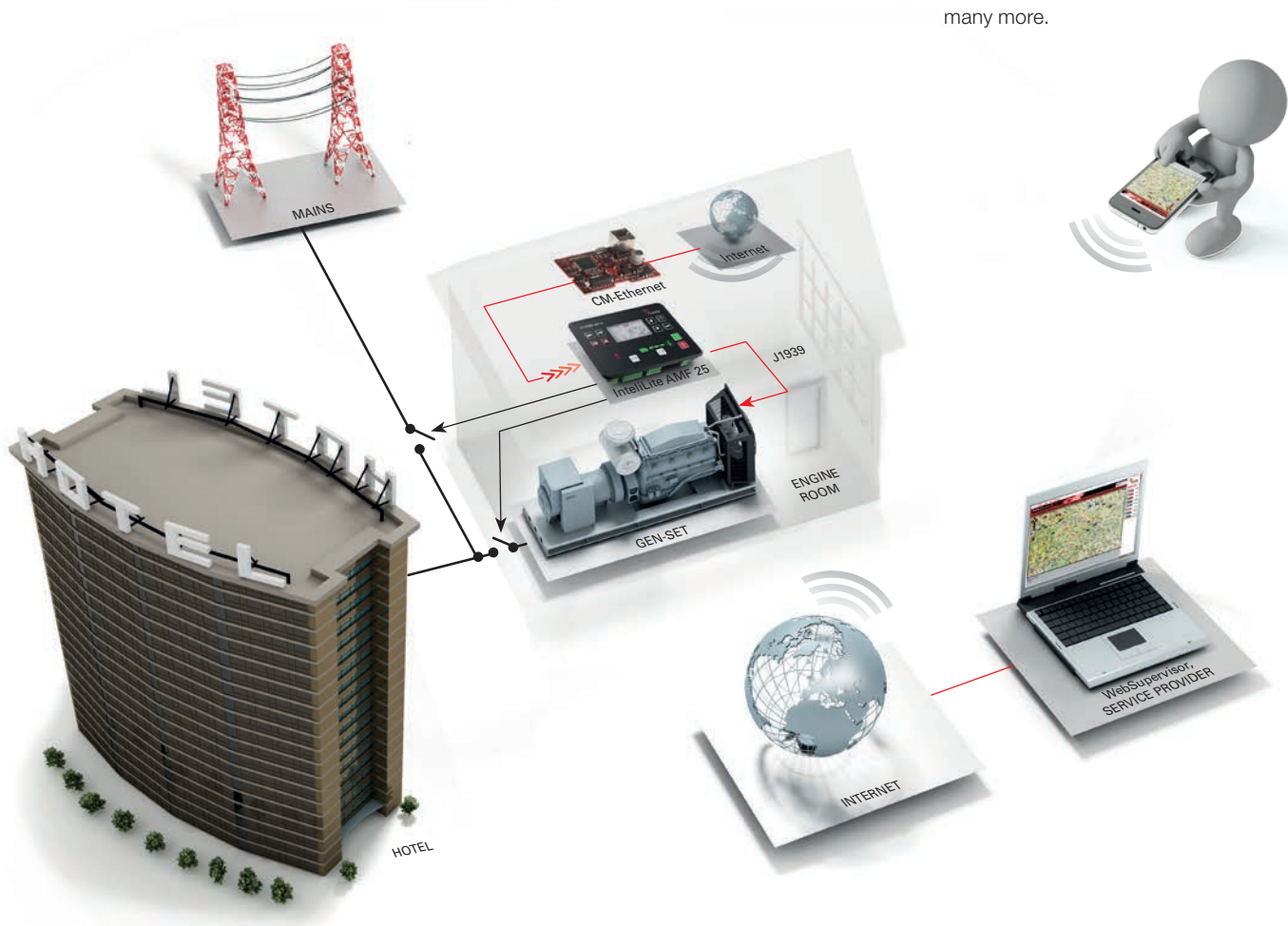
### Remote monitoring via Internet



> ComAp's AMF controllers allow you to effectively operate, monitor, and control a single gen-set operating in stand-by mode.

> New level of flexibility enabling customers to meet any application requirements.

> Get the gen-set under your watch and control it from basically anywhere using the wide range of communication capabilities that we offer - WebSupervisor, 4G, GPS, Ethernet, ModBus, SNMP, AirGate and many more.



Qatar

## Losail International Circuit

Pramac supplied 44 generators for lighting of the race events. The diesel generators can generate 330 kVA each, powered by Volvo Penta engines, are protected by a soundproof enclosure, and equipped with an automatic control panel unit, a GPRS modem for remote control and sand trap air filters for the notorious desert storms. A special modified version of ComAp's IntelliLite<sup>NT</sup> AMF 25, (called the AC03) was installed in the control panel on each of the generators to ensure reliable, and easily monitored, control for the race organisers.





## Multiple gen-sets in parallel to grid

Remote monitoring and control via Internet



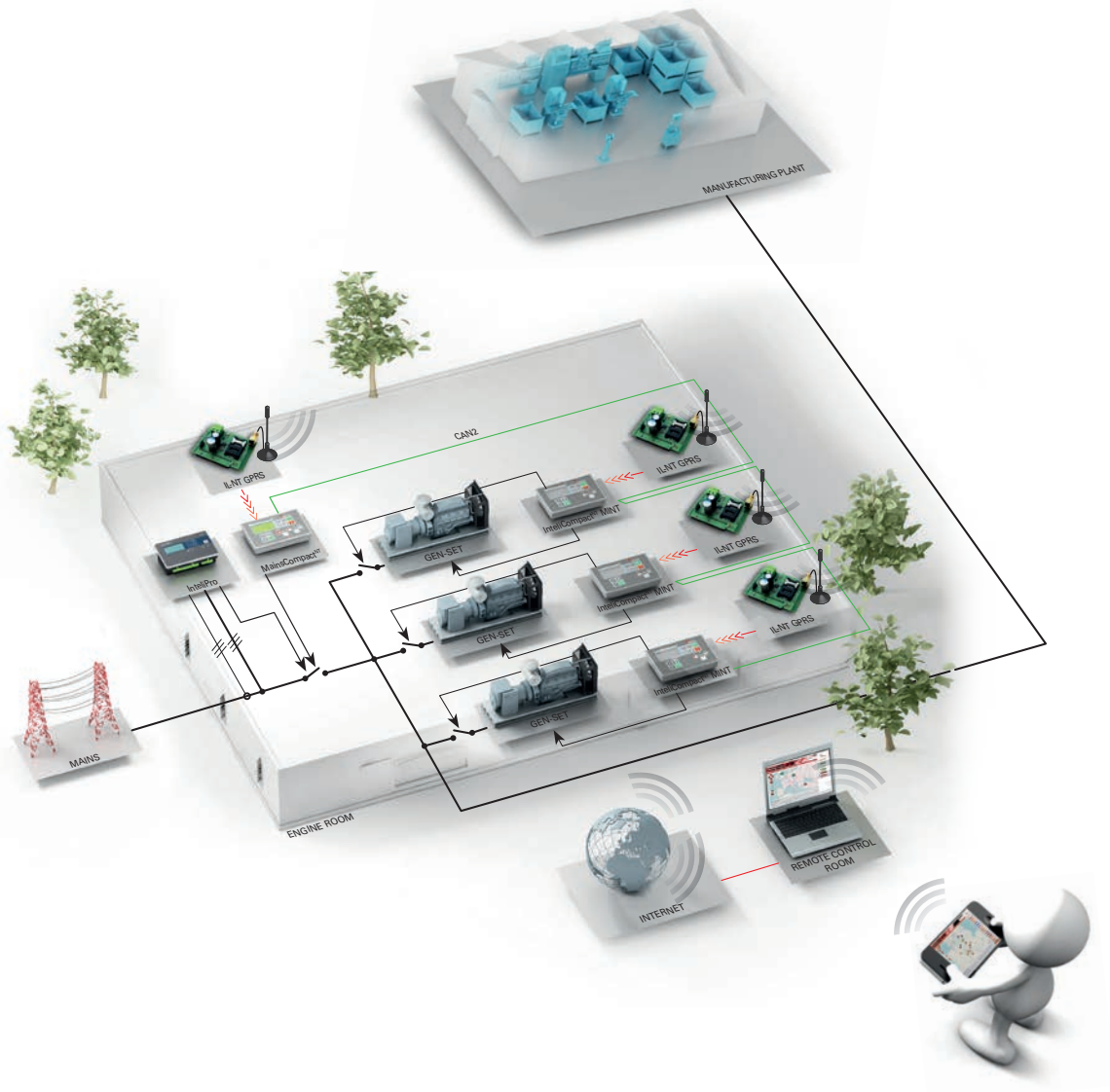
> Efficient and automatic power management – smart power management for gensets with different nominal power and running hours.



> Easy to install – if you have experiences with our non-parallel controllers, using of IntelliCompact<sup>NT</sup> will be a piece of cake for you.



> Whole site monitoring and remote control – use our WebSupervisor (web or mobile application) or IntelliMonitor PC software for monitoring of the whole site.



 Egypt

### Arab National Cement Company

Arab National Cement Company is newly built production plant of multinational company ASEC Cement Holding Co.. The huge requirement for the uninterrupted power supply is covered by 31 Caterpillar gen-sets, 18 units of 1000 kVA, 8 units 1500 kVA, 4 units 2000 kVA and 1 unit of 2000 kVA used as a emergency stand-by. The scope of supply of ComAp products consists of 31 IntelliCompact<sup>NT</sup> MINT units with accessories. The whole site is monitored remotely by combination of IB-Lite and IL-NT GPRS.

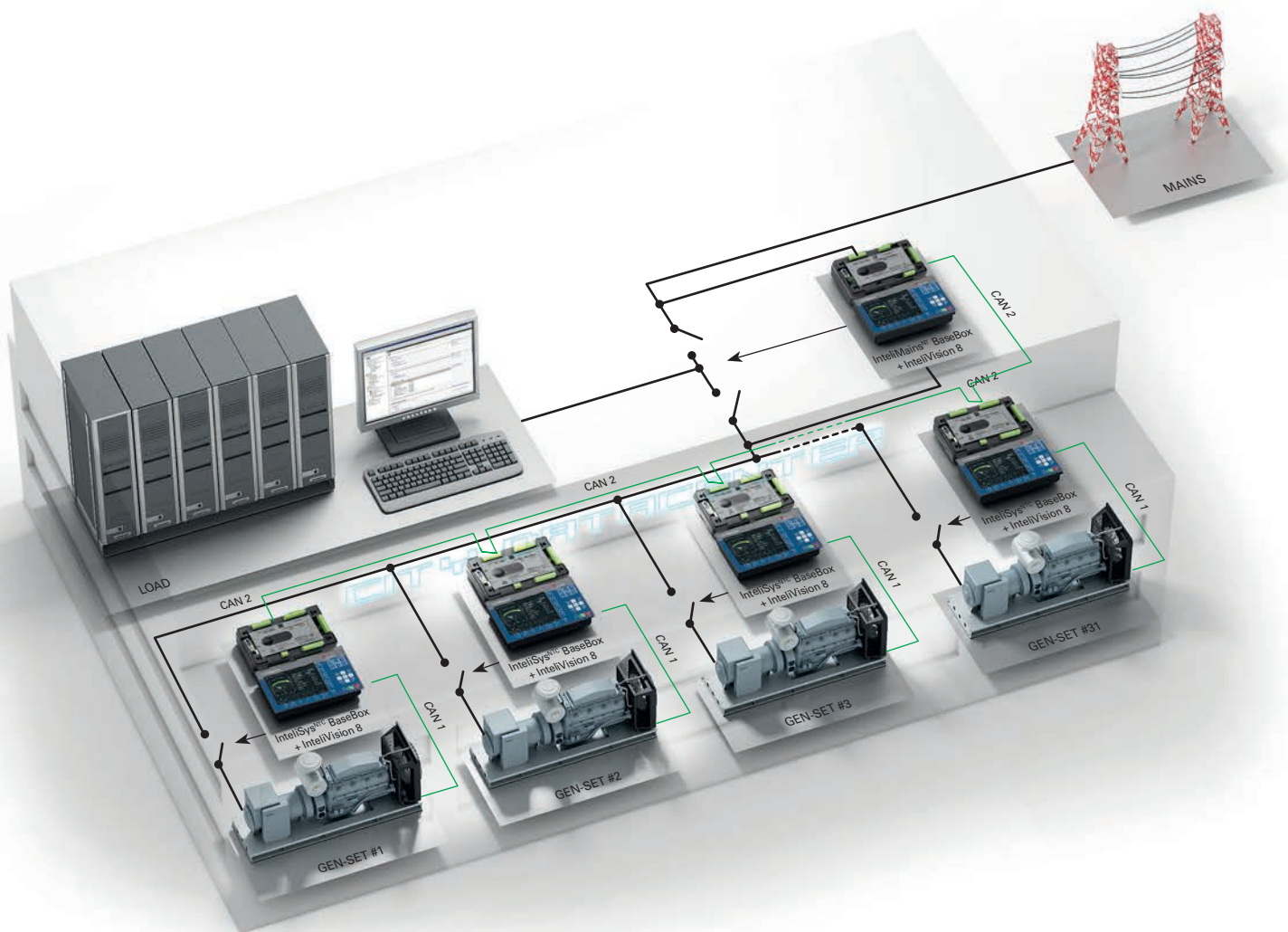


## Start-up synchro gensets

Quick AMF without standard gen-set synchronization



- > Extremely fast and reliable take-over of standby power due to start, synchronization and full load of gen-set group within 10 seconds from cold start.
- > Saving lifetime of UPS batteries thanks to minimized down-time.
- > Smooth energizing of transformers by eliminating of in-rush currents.



## United Kingdom London Data Centre

A major telecommunications company in the UK recently expanded their Data Centre on the outskirts of London. Several ComAp products were used for the power supply systems. The customer's maintenance technicians were extremely pleased with the system and have complete confidence with the ComAp controllers and using the HMI Panel Interface.

The Operator stated: "The control solution offers easy testing of the generators, allowing the operator to see exactly what is happening on the system via the IntelliVision 17Touch display in the HMI panel." The system was also integrated into the plant BMS system to provide a continuous status of the condition of the plant, providing alarm indication of any fault on the system to the company headquarters.





## Complex installation

### Multiple grids



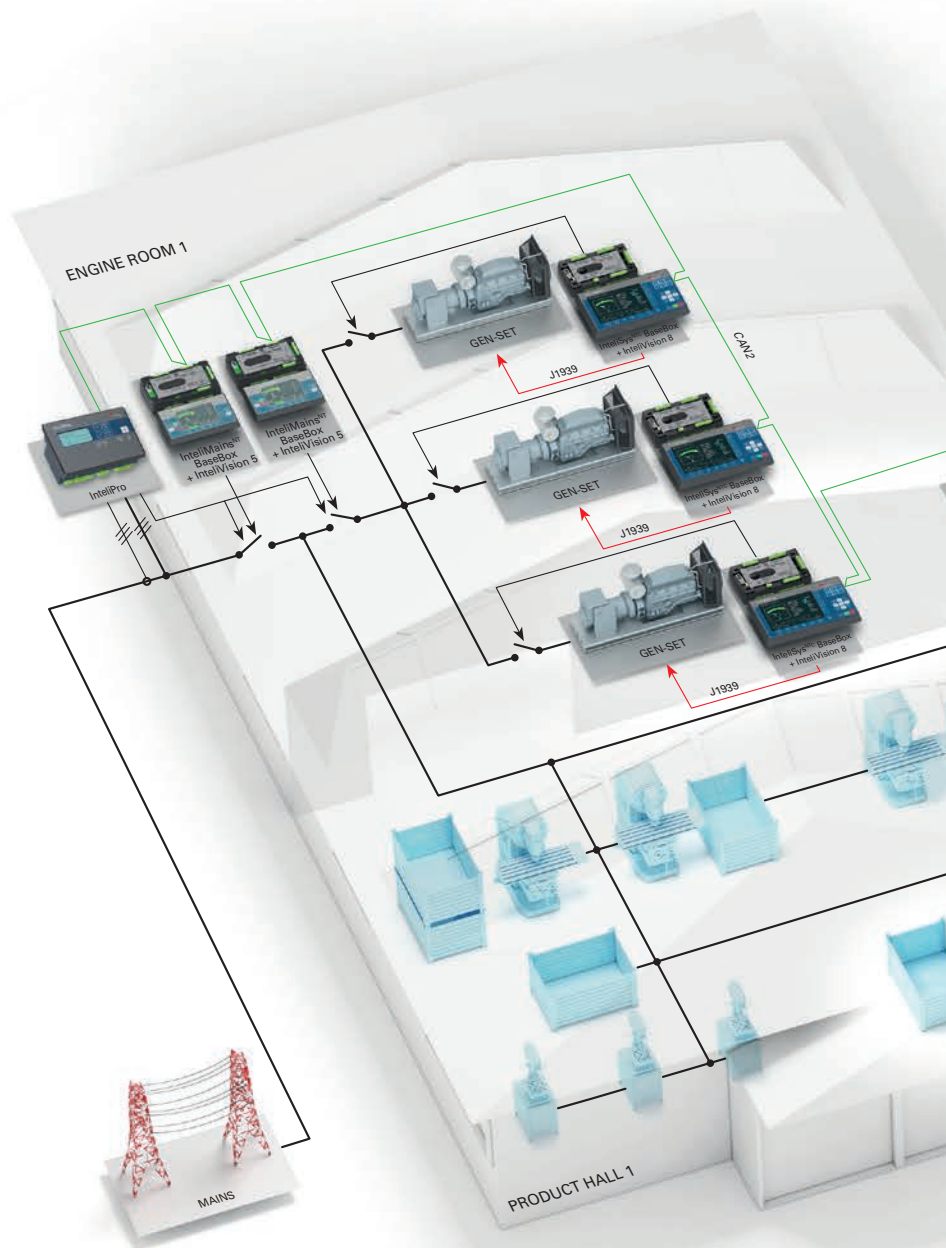
- > Distributed site control without the need for external PLC thanks to internal, openly programmable logic in controllers.



- > System modularity with the flexibility to add complex scenarios due to extensive system configuration capabilities.



- > Integration of the system into BMS, external SCADA or remote monitoring due to extensive communication options.



 Denmark

### Hvidovre hospital

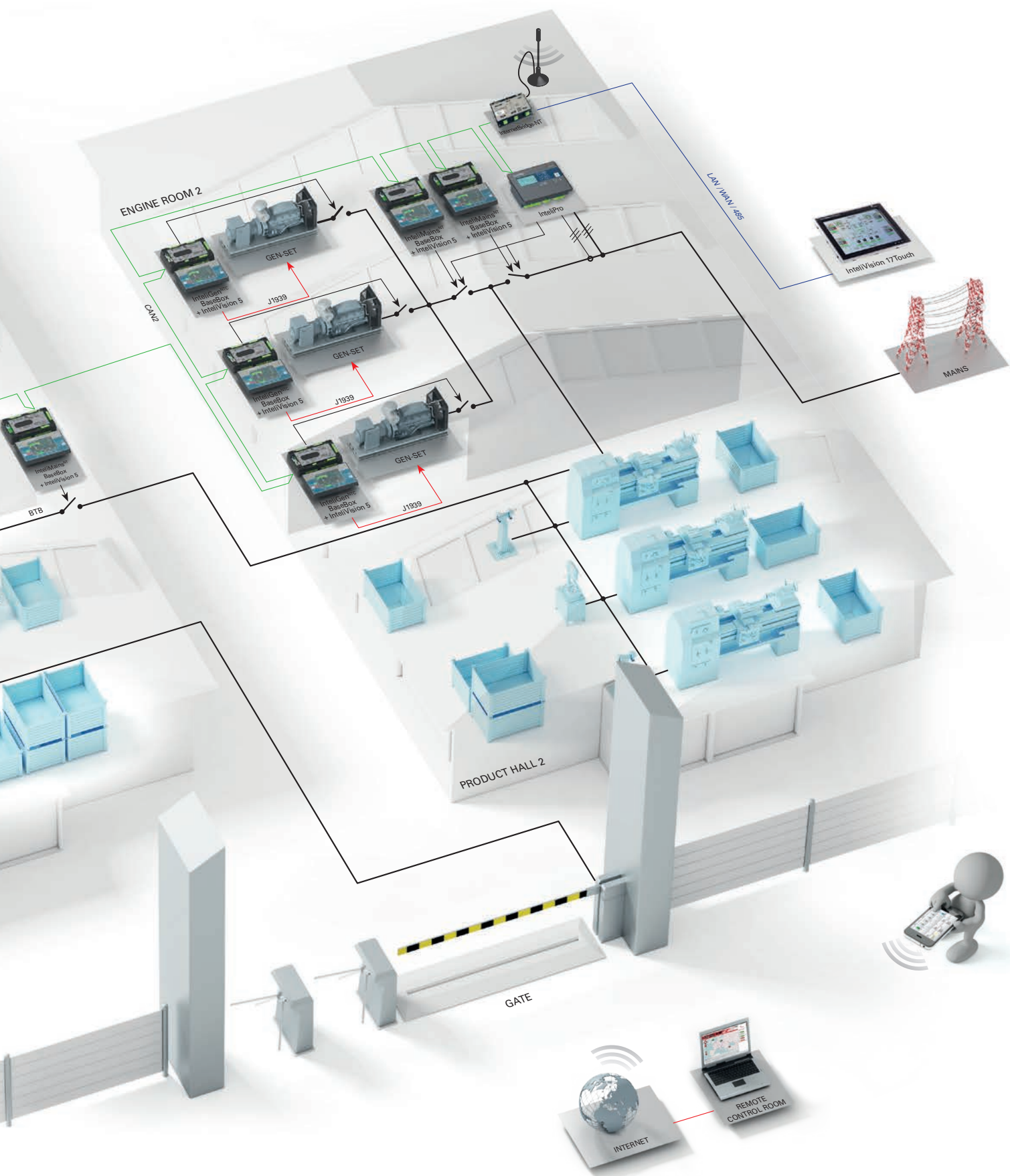
The backup system included five FG Wilson diesel generators, all equipped with IntelliSys<sup>NTC</sup> BaseBox and IntelliVision 8. Although the entire backup system was monitored from a control room using an IntelliVision 17Touch, an IntelliVision 5 display attached to each generator allowed for individual monitoring of each generator, to ensure the generators were all available for use, should an emergency arise. In case of a power outage the ComAp system that was installed has the generators up and running within 8 seconds, and on-load within 15 seconds.



Watch the project video!  
[youtube.com/ComApControlSystem](https://youtube.com/ComApControlSystem)







## Combined heat and power



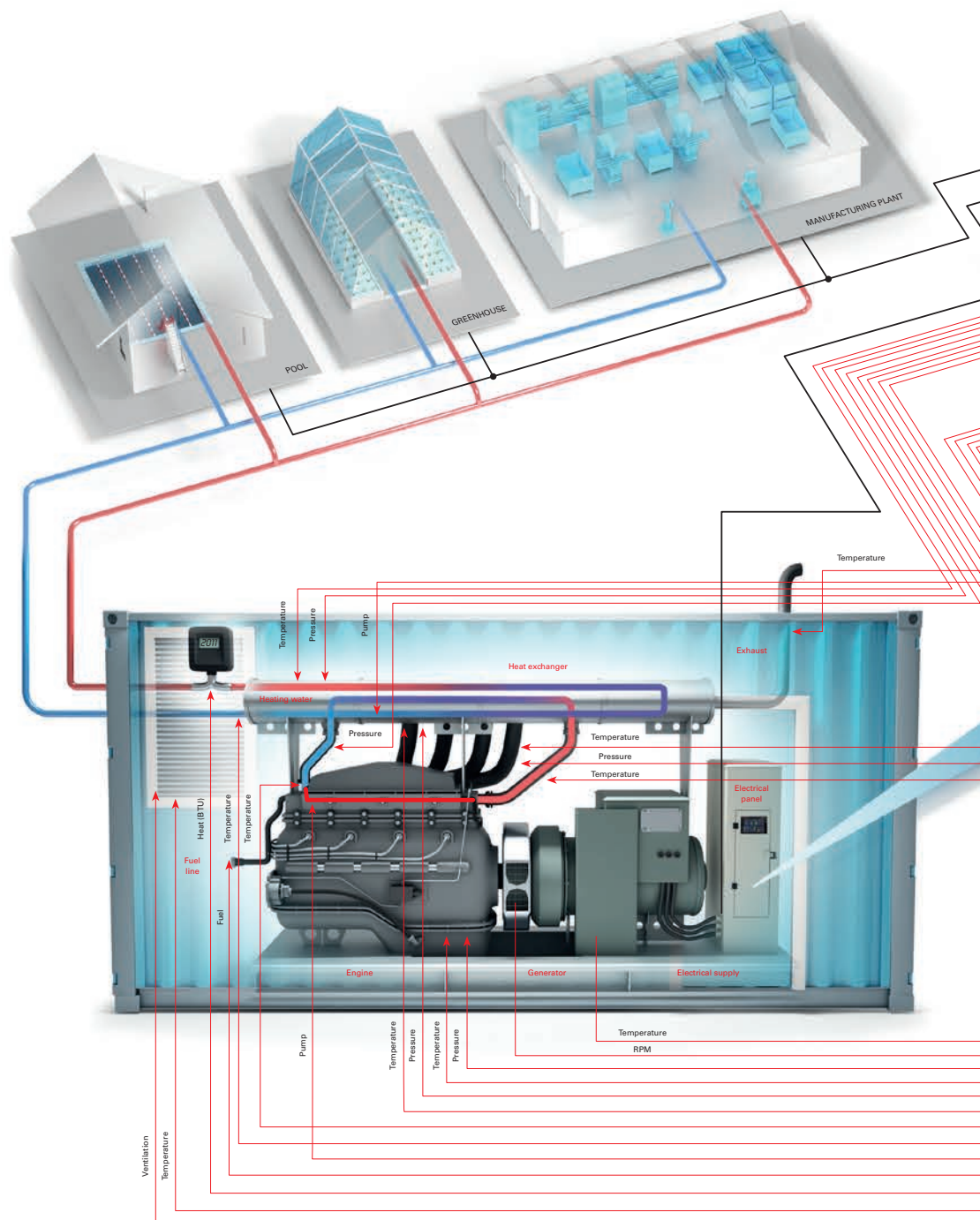
- > Preconfigured ready-to-run solution package with the flexibility for individual customization.



- > Easy to use tools for configuration, scaling and operation of the control system.



- > PC and Web based software tools for extensive data recording and remote monitoring for efficient plant and gen-set analysis.





Germany

**Uhlmann**

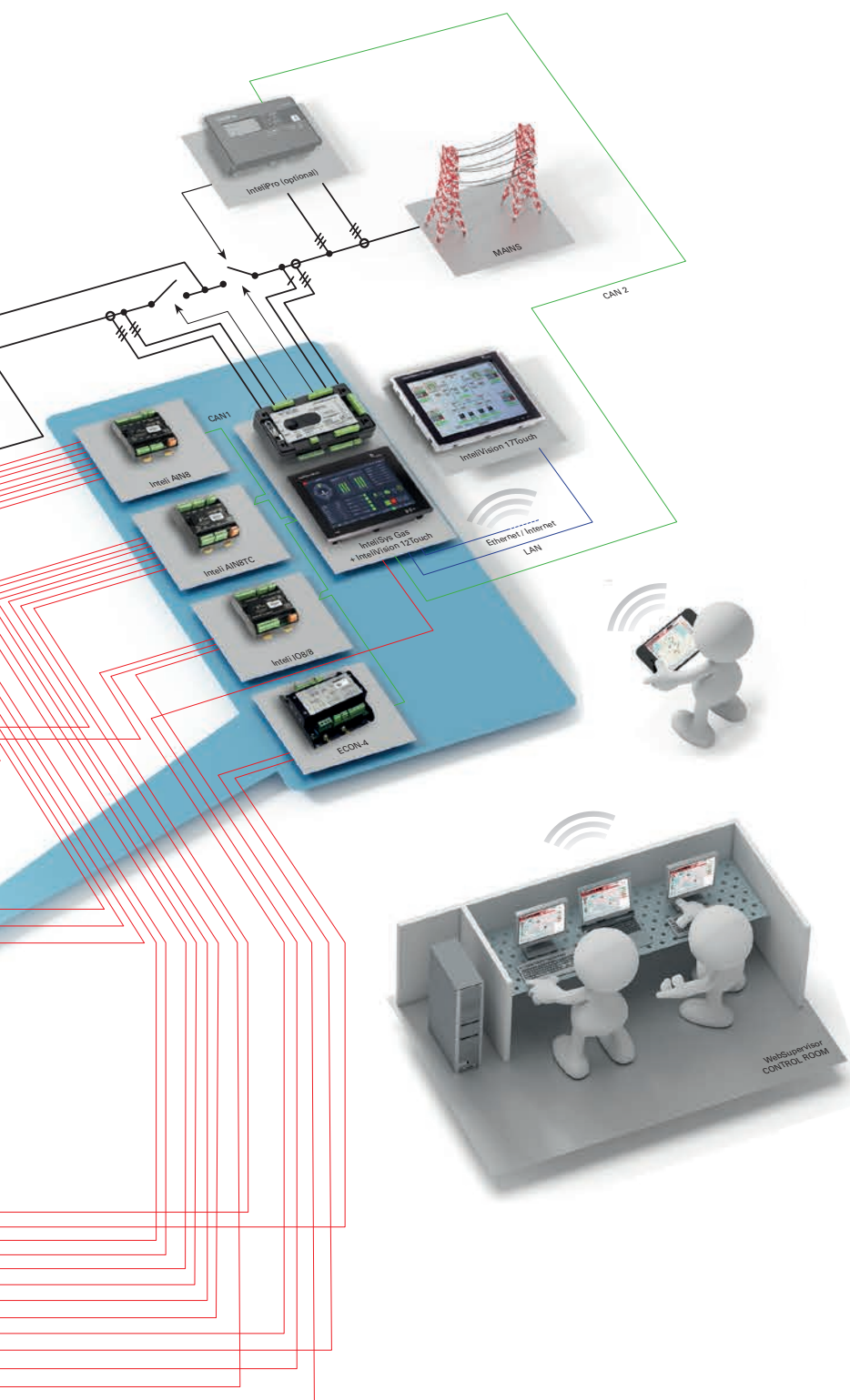
## Configuring for bi-fuel operation

The unique thing about this installation is that it is capable of simultaneously using two types of gas – biogas and natural gas – for power generation. Configuration of the PLC to run the CHP generator in this way is possible through IntelliSys<sup>NT</sup> BaseBox and IntelliVision 8, whose further benefits include extensive data logging which is used to monitor the plant continuously for maintenance reasons.



Watch the project video!

[youtube.com/ComApControlSystem](https://youtube.com/ComApControlSystem)





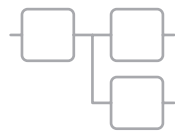
# Hybrid power plant



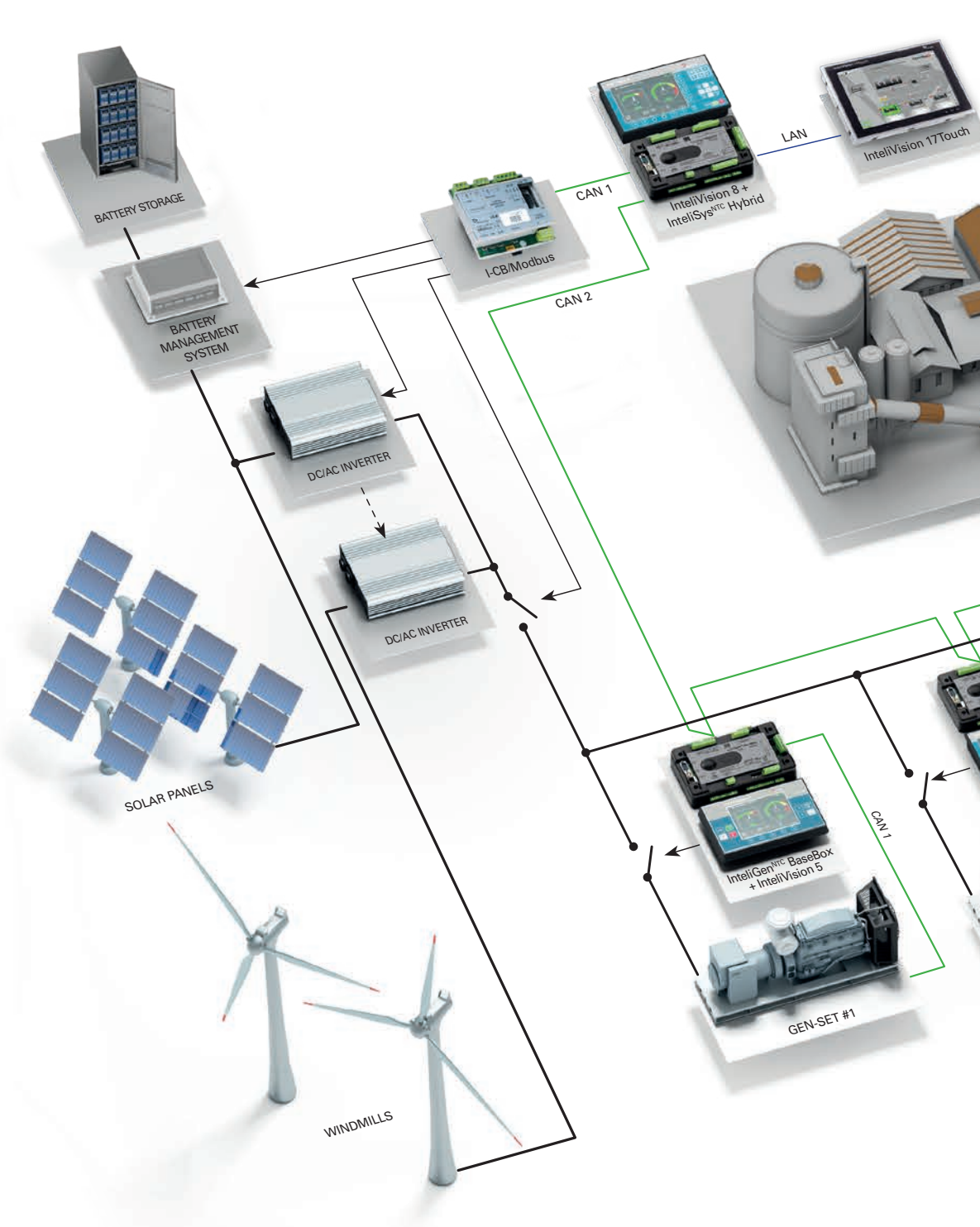
> Fully automatic gen-set control enables the system to react to changing conditions from a variable renewable source.



> Dynamic spinning reserve function allows the system to automatically start and stop the gen-sets without the need to reduce the power from the PV inverters.

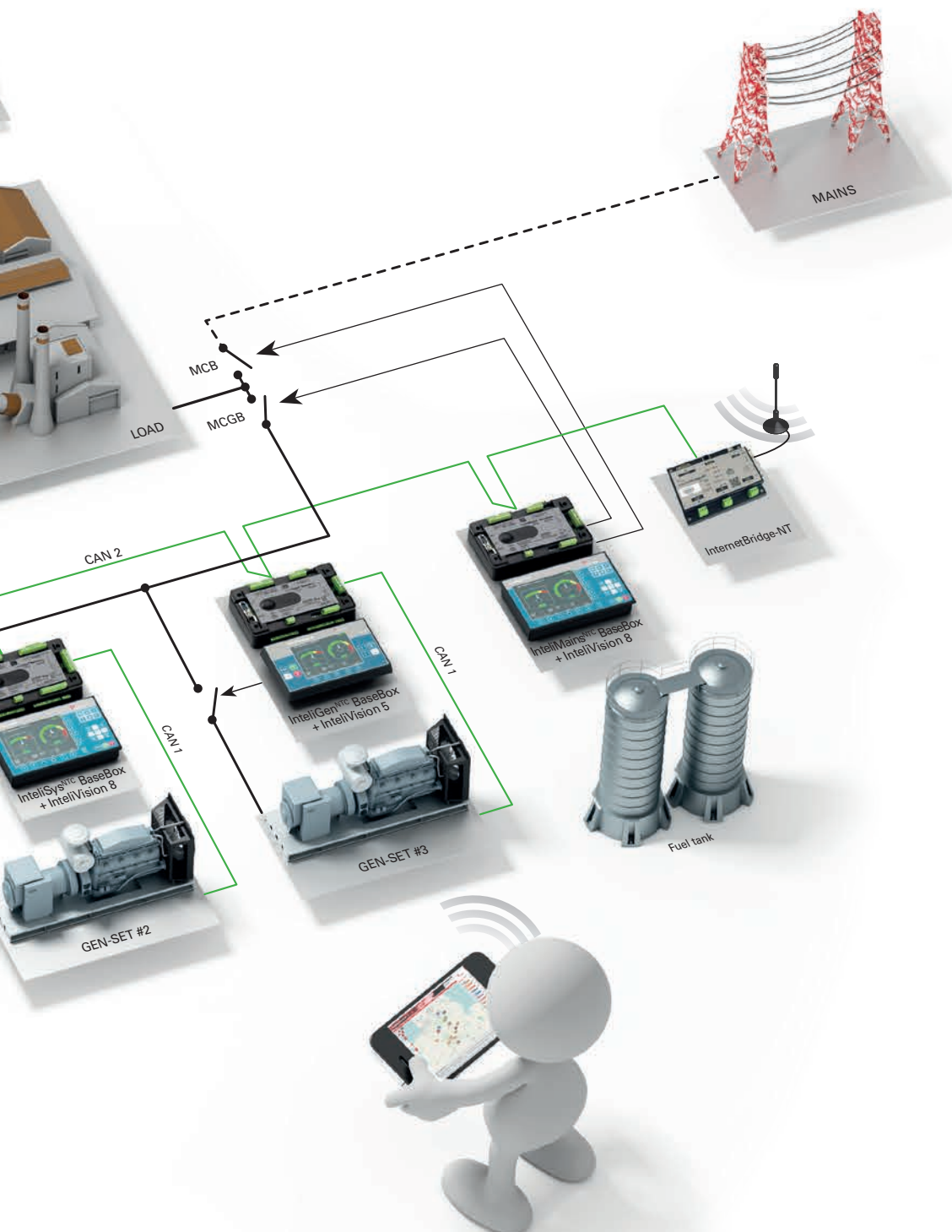


> Built in PLC programming allows you to adjust the control system to specific site conditions.



## Wind/Diesel power plant controls

Vanuatu used two 4 MW gen-sets to generate electricity. However they also have a 3 MW wind farm, and the output of this obviously varies greatly from zero to 3 MW. An additional issue which needed to be countered is that if the wind gets too fast the wind farm automatically shuts down to protect itself, but this means that the output goes from 3 MW to zero in 30 seconds. ComAp designed a system where four spare 800 kW Cummins sets were upgraded with IntelliGen<sup>NT</sup> controllers and these run in a power management mode. Most of the time one set is running but as the wind drops off, other sets will start up through ComAp's standard power management. Normally it takes only 15 seconds to get the idle gen-set running and synchronized. All relevant data can be seen through ComAp IntelliMonitor SCADA system.



## Marine power management and propulsion engine system



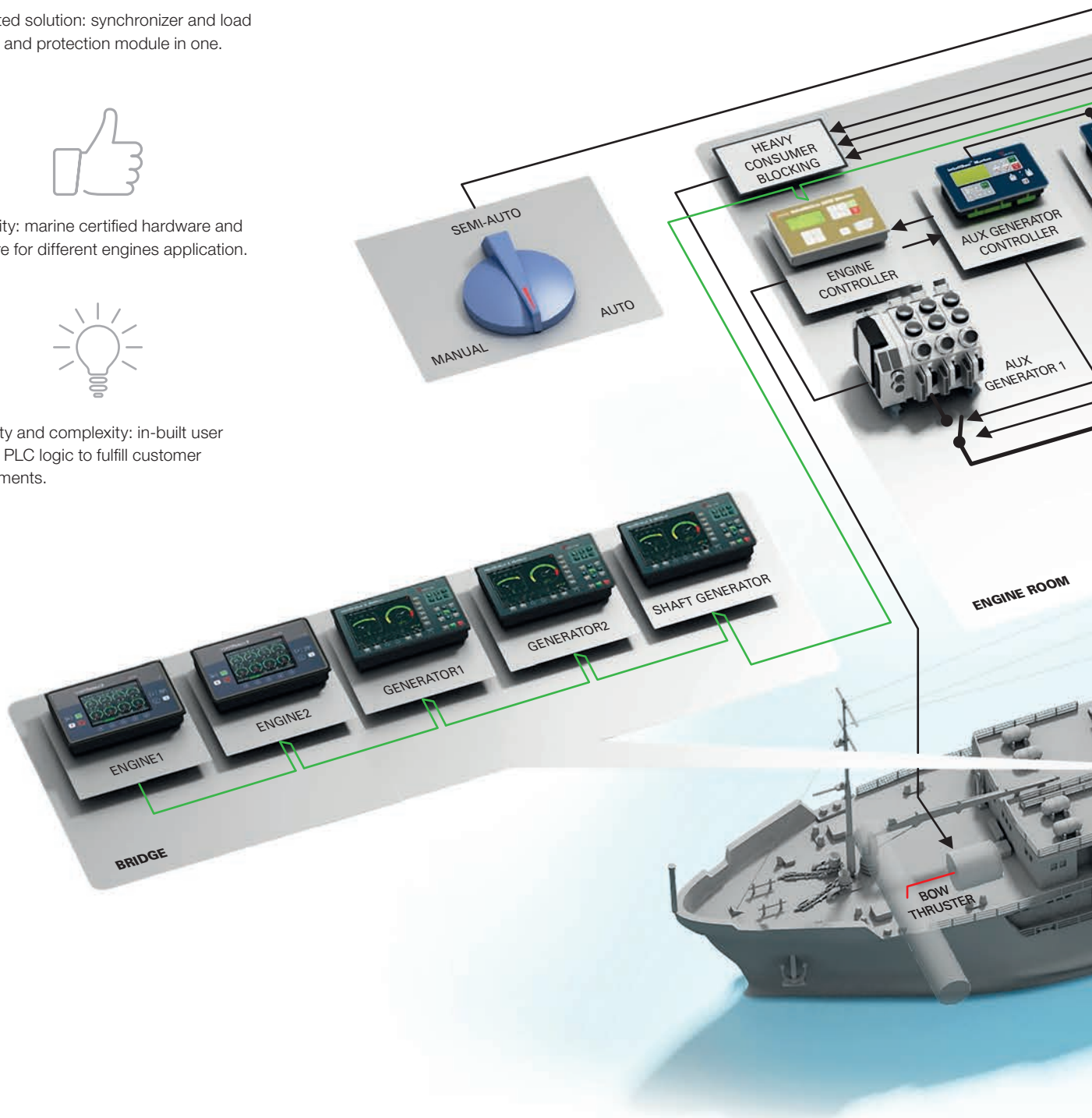
- > Integrated solution: synchronizer and load sharing and protection module in one.



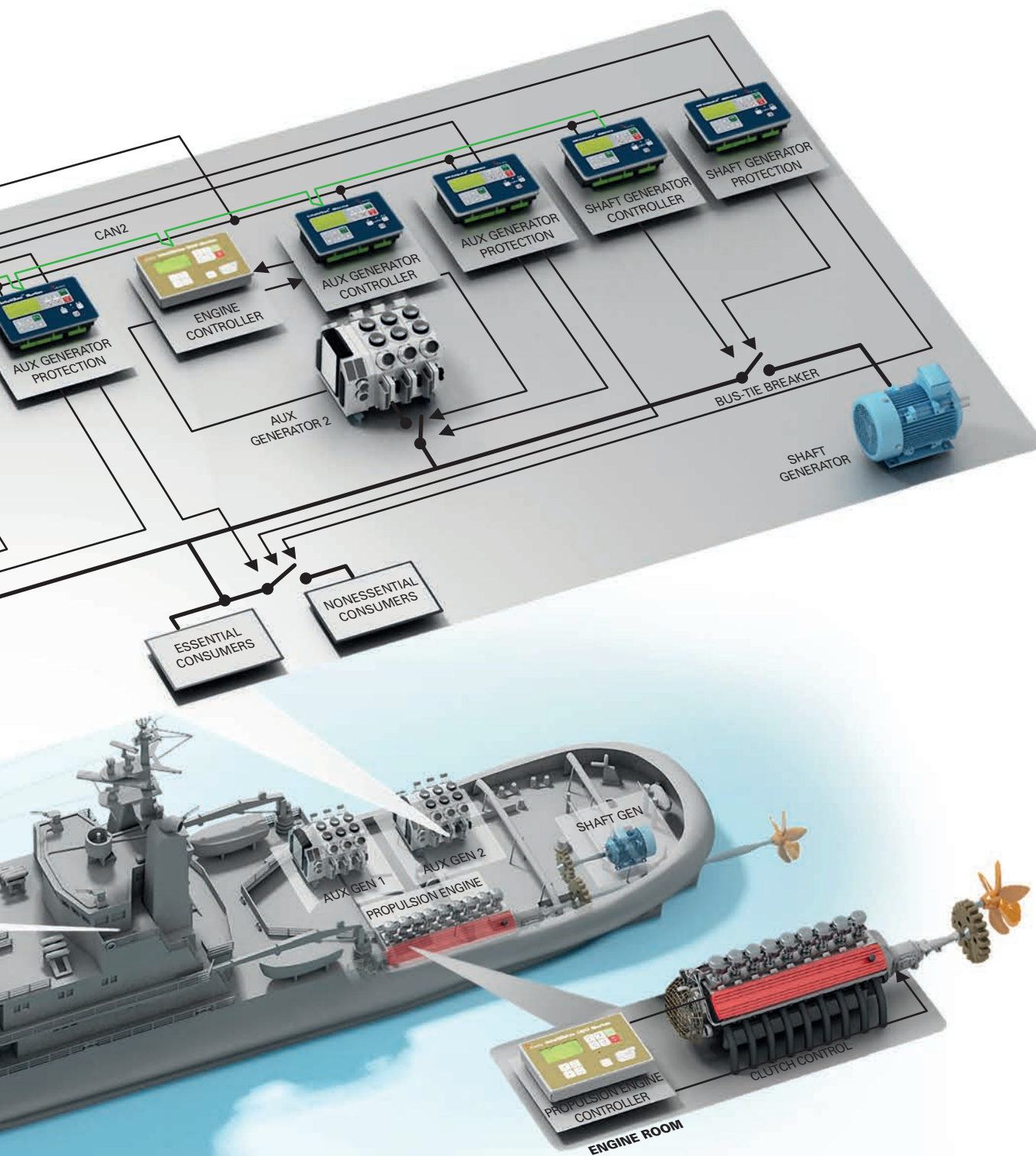
- > Reliability: marine certified hardware and software for different engines application.



- > Flexibility and complexity: in-built user friendly PLC logic to fulfill customer requirements.







 Denmark

## Marine solution for the ferry Faaborg III

Nordhavn, one of the largest marine gen-set builders in Scandinavia, installed two new engines and gen-sets equipped with ComAp controllers and displays on the ferry Faaborg III. All five onboard engines are fitted with IntelliDrive DCU Marine controllers which communicate with the ferry's SCADA system provided by Emerson. The IntelliDrive DCU Marine controllers operate in three application modes (Propulsion, Auxiliary and Emergency) allowing the controllers to control, monitor and protect every engine and also to integrate fully into the ferry's power management and monitoring systems.



Watch the project video!  
[youtube.com/ComApControlSystem](https://youtube.com/ComApControlSystem)



## Pump system



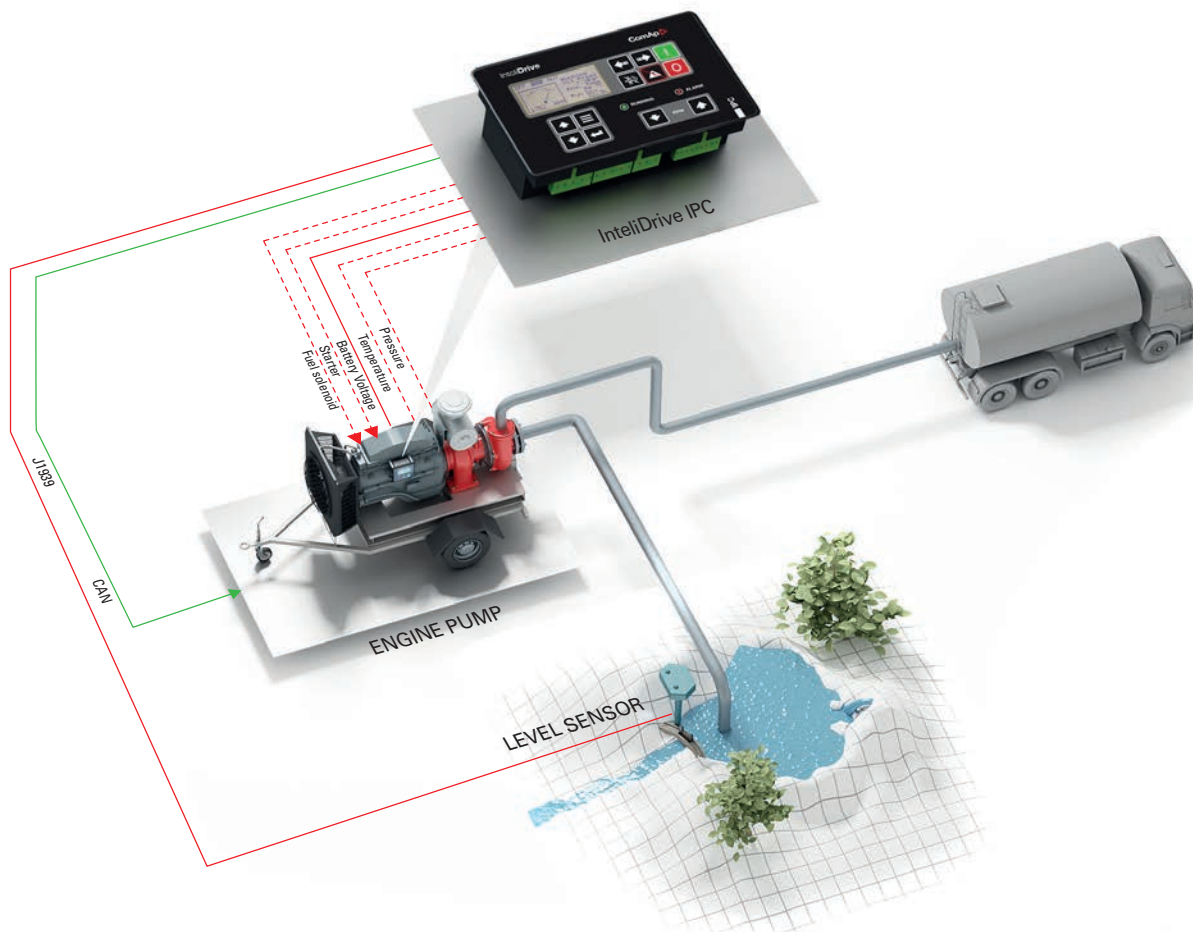
> Easy to install, configure and operate



> Complex control made simple



> No PC required



### Australia

## Mobile Acid Pump for the Mining Industry

Dynapumps of Perth have supplied a mobile engine driven pump for acid movement to the Western Australian mining industry. The Cummins 6BT engine is connected to a stainless steel self-priming centrifugal pump specially designed for pumping acid.

The engine speed can be varied between 1600 and 2100 rpm based on pressure inputs. All control signals are sent to the IntelliDrive via telemetry in Modbus protocol utilizing the high level communications capabilities of the controller. As well as providing engine protection the IntelliDrive controller also monitors and provides protection for pump pressure and flow.





## Bi-fuel powered remote solution using stored gas



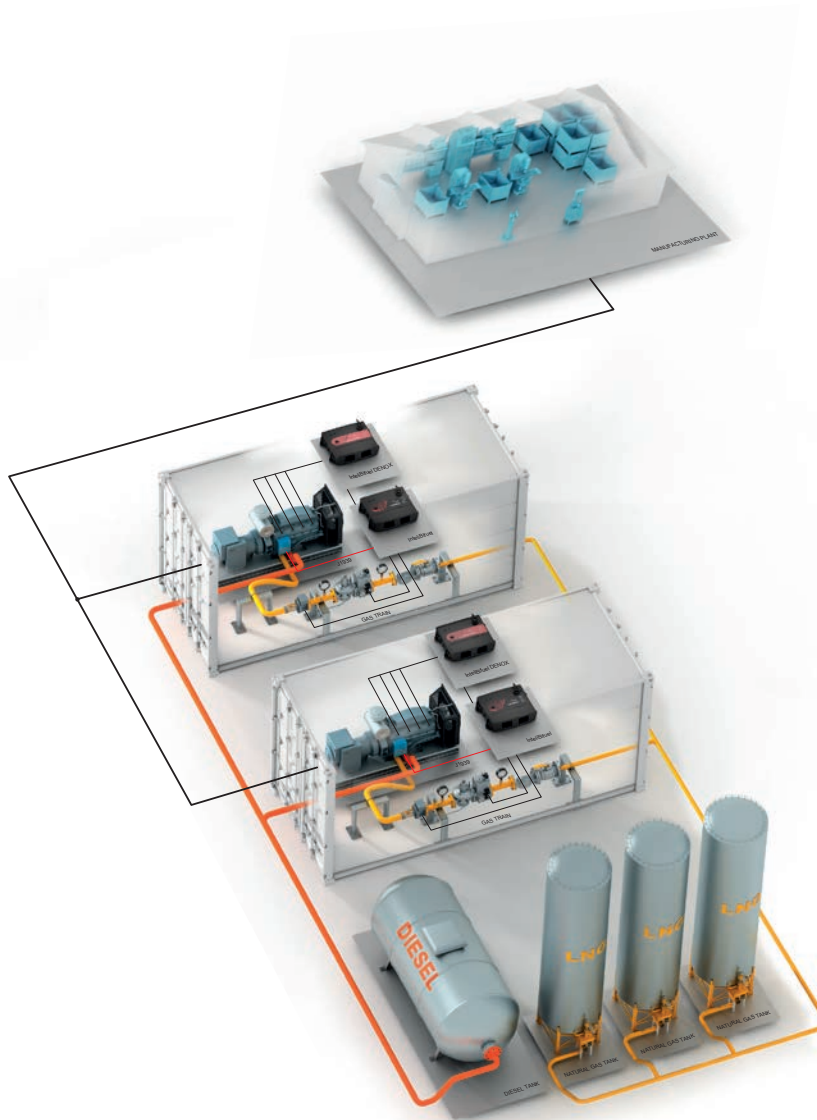
> Lower fuel costs



> Simply adaptive



> Environmentally friendly



Ghana

### Trojan Power 25 megawatt Bi-fuel conversion

Trojan Power, a wholly owned, independent power generation company in Ghana, Africa have completed ComAp's largest Bi-fuel conversions to date. Twenty four Caterpillar C32 and eight Caterpillar 3508 generators were converted to Bi-fuel for a total power output of 25 megawatts. The 32 bi-fuel generators are housed in two power houses with 16 generators in each and regularly function at a 70 % gas to 30 % diesel ratio, giving significant financial savings. This huge power plant quickly provides reliable power for the surrounding area for customers who were previously relied on aging mains power electricity infrastructure.





# Product features

## Controllers for single gen-set applications

IntelliNano<sup>NT</sup> PLUS



IntelliLite<sup>NT</sup> MRS 10



IntelliLite<sup>NT</sup> MRS 16



IntelliLite<sup>NT</sup> AMF 9



Binary inputs / outputs	6 / 6 <sup>2)</sup>	6 / 6	6 / 6	4 / 6
Analog inputs	3 <sup>3)</sup>	3	3	3
2 x 10 A binary outputs	–	–	–	–
Input / output configurations	• / •	• / •	• / •	• / •
D+ battery charging alternator circuit	•	•	•	•
Magnetic pickup	–	•	•	–
AMF / MRS functions	• / •	– / •	– / •	• / •
GCB / MCB control with feedback	• / •	• / –	• / –	• <sup>9)</sup> / • <sup>9)</sup>
3ph voltage measurement Gen. / Mains	• <sup>4)</sup> / •	• / –	• / –	• / •
3ph current measurement	– <sup>5)</sup>	•	•	•
Frequency measurement Gen. / Mains	• / •	• / –	• / •	• / •
kW / kWh / kVA measurement	– / – / •	• / • / •	• / • / •	• / • / •
Generator protections	•	•	•	•
Earth fault current protections	–	–	•	–
History file	•	•	•	•
RTC / Battery	– / –	– / –	• / •	– / –
PLC	–	–	–	–
Remote control	–	○	○	○
4G	–	–	–	–
Tracking & Geofencing	–	–	–	–
Active SMS / E-mails	–	○	○	○
AirGate	–	○	○	–
WebSupervisor	–	○	○	–
USB integrated	•	– <sup>6)</sup>	– <sup>6)</sup>	• <sup>10)</sup>
ECU support via CAN	•	–	–	•
Modbus support / SNMP support / SNMP traps	– / – / –	○ / ○ / ○	○ / ○ / ○	– / – / –
Plug-in modules	–	• <sup>7)</sup>	• <sup>8)</sup>	• <sup>11)</sup>
Manual speed control <sup>1)</sup>	–	–	–	–
Total fuel consumption	–	–	•	–
Fuel pump	–	–	–	–
Dummy load / Load shedding	–	•	•	–
Auto. temperature based heating & cooling	–	•	•	–
Analog calibration	–	•	•	–
Connection type autodetect	–	–	–	–
Tier 4 Final support	–	–	–	–

- Included
- Excluded
- Optional – plug-in module required
- GCB: Generator circuit breaker
- MCB: Mains circuit breaker

- 1) For ECU engines
- 2) 1 binary input is shared with binary output
- 3) Analog inputs are shared with binary inputs
- 4) 1 ph; 3 ph when used as MRS controller
- 5) 1 ph is available

IntelLite<sup>NT</sup> AMF 25

IntelLite MRS 11

IntelLite MRS 16

IntelLite AMF 20

IntelLite AMF 25



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6) Plug-in module required

7) IL-NT RS232, IL-NT RS232-485, IL-NT GPRS, IL-NT S-USB, IB-Lite, IL-NT AOUT8, IL-NT BIO8

8) The same as 7) plus IC-NT CT-BIO7







9) Manual / Automatic GCB and MCB control, but without feedback

10) Available in Q2 2016; only for model with order code: IL2A9USBXAB

11) IL-NT RS232, IL-NT RS232-485, IL-NT GPRS, IL-NT S-USB, IL-NT AOUT8, IL-NT BIO8

12) CM-RS232-485, CM-GPRS, CM-4G-GPS, CM-Ethernet, EM-BIO8-EFCP

# Controllers for parallel gen-set applications

	Intellicompact <sup>NT</sup> SPtM	Intellicompact <sup>NT</sup> MINT	IntelGen NTC	IntelGen <sup>NT</sup> BaseBox	IntelGen <sup>NTC</sup> BaseBox	IntelSys <sup>NTC</sup> BaseBox
						
Binary Inputs / Outputs	9 / 8 (up to 25/24) <sup>2)</sup>	9 / 8 (up to 25/24) <sup>2)</sup>	12 / 12 (108 / 108) <sup>10)</sup>	12 / 12 (108 / 108) <sup>10)</sup>	12 / 12 (108 / 108) <sup>10)</sup>	16 / 16 (112 / 112) <sup>10)</sup>
Analog Inputs / Outputs	3 / 0 (up to 7 <sup>3)</sup> / 9 <sup>4)</sup>	3 / 0 (up to 7 <sup>3)</sup> / 9 <sup>4)</sup>	3 / 0 (83 / 32) <sup>10)</sup> (configurable as tristate)	3 / 0 (83 / 32) <sup>10)</sup> (configurable as tristate)	3 / 0 (83 / 32) <sup>10)</sup> (configurable as tristate)	4 / 1 (84 / 33) <sup>10)</sup> (configurable as tristate)
AMF function	•	• <sup>9)</sup>	•	•	•	•
GCB control with feedback	•	•	•	•	•	•
Integrated PLC	–	–	Standard <sup>11)</sup>	Standard <sup>11)</sup>	Standard <sup>11)</sup>	Extended
Input configuration	•	•	•	•	•	•
Output configuration	•	•	•	•	•	•
Voltage measurement Gen / Mains (bus)	3 ph / 3 ph 277V	3 ph / 3 ph 277V	3 ph / 3 ph 277V	3 ph / 3 ph 277V	3 ph / 3 ph 120V / 277V	3 ph / 3 ph 120V / 277V
Current measurement	3 ph + 1 <sup>5)</sup> , IDMT overcurrent 5A	3 ph + 1 <sup>5)</sup> , IDMT overcurrent 5A	3ph + 1 / 6w IDMT overcurrent 1A / 5A	3ph + 1 / 6w IDMT overcurrent 5A	3ph + 1 / 6w IDMT overcurrent 1A / 5A	3ph + 1 / 6w IDMT overcurrent 1A / 5A
kW / kWh / kVA measurement	• / • / •	• / • / •	• / • / •	• / • / •	• / • / •	• / • / •
Extension modules	• <sup>6)</sup>	• <sup>6)</sup>	• <sup>12)</sup>	• <sup>12)</sup>	• <sup>12)</sup>	• <sup>12)</sup>
Extension plug-in modules	IL-NT AOUT8, IL-NT BIO8, IC-NT CT-BIO7 <sup>7)</sup>	IL-NT AOUT8, IL-NT BIO8, IC-NT CT-BIO7	–	–	–	–
Remote displays	IC-NT RD (SW)	IC-NT RD (SW)	IntelVision 5, IntelVision 8, IntelVision 12Touch, IntelVision 17Touch	IntelVision 5, IntelVision 8, IntelVision 12Touch, IntelVision 17Touch	IntelVision 5, IntelVision 8, IntelVision 12Touch, IntelVision 17Touch	IntelVision 5, IntelVision 8, IntelVision 12Touch, IntelVision 17Touch
Communication modules (via CAN)	InternetBridge-NT, I-LB+	InternetBridge-NT, I-LB+	InternetBridge-NT, I-LB+, I-CR, I-CR-R, I-CB	InternetBridge-NT, I-LB+, I-CR, I-CR-R, I-CB	InternetBridge-NT, I-LB+, I-CR, I-CR-R, I-CB	InternetBridge-NT, I-LB+, I-CR, I-CR-R, I-CB
Communication plug-in modules	IB-Lite, IL-NT GPRS, IL-NT RS232, IL-NT RS232-485, IL-NT S-USB	IB-Lite, IL-NT GPRS, IL-NT RS232, IL-NT RS232-485, IL-NT S-USB	–	–	–	–
Communication interfaces	CAN1, CAN2, RS232 <sup>8)</sup> , RS485 <sup>8)</sup> , USB <sup>8)</sup> , Ethernet <sup>8)</sup> , GPRS <sup>8)</sup> , Modbus <sup>8)</sup> , Modbus TCP <sup>8)</sup> , AirGate <sup>8)</sup> , Web server <sup>8)</sup>	CAN1, CAN2, RS232 <sup>8)</sup> , RS485 <sup>8)</sup> , USB <sup>8)</sup> , Ethernet <sup>8)</sup> , GPRS <sup>8)</sup> , Modbus <sup>8)</sup> , Modbus TCP <sup>8)</sup> , AirGate <sup>8)</sup> , Web server <sup>8)</sup>	CAN1, CAN2, RS232, 2x RS485, USB, Ethernet <sup>8)</sup> , Modbus RTU, SNMP <sup>13)</sup> , AirGate <sup>13)</sup> , Web server <sup>13)</sup>	CAN1, CAN2, RS232, RS485, Ethernet <sup>8)</sup> , Modbus RTU, SNMP <sup>13)</sup>	CAN1, CAN2, RS232, 2x RS485, USB, Ethernet, Modbus RTU, Modbus TCP, SNMP, AirGate, Web server	CAN1, CAN2, RS232, 2x RS485, USB, Ethernet, Modbus RTU, Modbus TCP, SNMP, AirGate, Web server
ECU support	•	•	•	•	•	•
Active call / SMS support	○ / •	○ / •	•	•	•	•
Forward / Reverse synchronizing / Mains parallel operation	• / • / •	• / • <sup>9)</sup> / • <sup>9)</sup>	• / • / •	• / • / •	• / • / •	• / • / •
Multiple operation / Power Management System	–	•	• <sup>14)</sup>	• <sup>14)</sup>	• <sup>14)</sup>	• <sup>14)</sup>
Display	LCD 128x64	LCD 128x64	LCD 128x64	External	External	External
History (max records) <sup>1)</sup>	200	200	500	1000	1000	4000

KEY

- Included
- Excluded
- Optional – plug-in module required

CAN1  
CAN2



For peripheral modules and ECU (J1939)  
Intercontroller can; monitoring

- 1) Depends on number of values in history record
- 2) With IL-NT BIO8 and IG-IOM or IGS-PTM
- 3) With IG-IOM or IGS-PTM
- 4) With IL-NT AOUT8 and IG-IOM or IGS-PTM
- 5) With IC-NT CT-BIO7
- 6) IGL-RA15, IG-IOM, IGS-PTM
- 7) IC-NT CT-BIO7 is already included in the controller
- 8) With communication modules

- 9) With MainsCompact<sup>NT</sup>
- 10) With extension modules, see 12)
- 11) More PLC blocks may vary according to the used firmware
- 12) Intel AIN8, Intel AIN8TC, Intel IO8/8, Intel AIO9/1, IS-AIN8, IS-AIN8TC, IS-BIN16/8, I-AOUT8, IGL-RA15, IGS-PTM
- 13) With InternetBridge-NT
- 14) With IGS-NT-LSM+PMS dongle









## Controllers for engine driven and bi-fuel applications

	IntelDrive IPC	IntelDrive Lite	IntelDrive DCU Industrial	IntelDrive DCU Marine	IntelDrive Mobile	IntelBifuel
						
Binary inputs	5x Digital inputs 1x RPM	7x Digital inputs 1x RPM	14x Digital inputs 1x RPM	14x Digital inputs 1x RPM	16 Digital inputs (4x BW detection) 4x RPM 2x Impulse inputs	9 Digital inputs 3x RPM inputs 3x Impulses Inputs
Total binary inputs (with additional modules)	13	15	78	78	80	73
Binary outputs	5	7	14	14	8x Hi-side 3 A switches with BW detection 8x 3 A switches configurable as: • Hi-side switches • Low-side • PWM	8x Hi side 0,5 A 8x Hi-Side/Low Side or PWM switches 3A 2x Hi-Side Safety switches 3A
Total binary outputs (with additional modules)	13 + 15 (IGL-RA15)	14 + 15 (IGL-RA15)	78	78	80	82
Analog inputs	6 Configurable (V, Ω)	9x Configurable (V, Ω)	8 configurable (V, mA, Ω, thermocoupler, PT100/1000)	8 configurable (V, mA, Ω, thermocoupler, PT100/1000)	16 configurable (V, mA, Ω, PT100/1000)	10 configurable (0 – 5 V, 0 – 20 mA, 0 – 24 V, 0 – 2500 Ohm, PT1000, isolated thermocouple)  3 Non isolated thermocouple inputs
Total analog inputs (with additional modules)	6x + 4x (IL-NT AIO)	9x + 4x (IL-NT AIO)	40	40	48	53
Analog outputs	On external modules (1x IL-NT AIO or 8x IL-NT AOUT8)	On external modules (1x IL-NT AIO or 8x IL-NT AOUT8)	On external modules (e.g. 2x ID-SCM, 8x I-AOUT8)	On external modules (e.g. 2x ID-SCM, 8x I-AOUT8)	8x configurable (V, mA)  1x Speed Governor (V, PWM)	6x configurable (0 – 10 V, 0 – 20 mA)  1x PWM 5V 450-3000Hz
Total analog outputs (with additional modules)	8	8	32	32	41	38
External communication modules	IB-Lite, IL-NT S-USB, IL-NT RS232, IL-NT RS232-485, IL-NT GPRS	IB-Lite, IL-NT S-USB, IL-NT RS232, IL-NT RS232-485, IL-NT GPRS	InternetBridge-NT, I-CB, I-LB+, I-CR	InternetBridge-NT, I-CB, I-LB+, I-CR	InternetBridge-NT, I-CB, I-LB+, I-CR	InternetBridge-NT, I-CB, I-LB+, I-CR
Modem	External	External	External	External	Internal (Option)	Internal (Option)
GPS	–	–	External	External	Internal (Option)	Internal (Option)
Communication interfaces	1x CAN, 1x RS232, 1x RS485, 1x USB, 1x Ethernet	1x CAN, 1x RS232, 1x RS485, 1x USB, 1x Ethernet	2x CAN, 1x RS232, 1x J1708	2x CAN, 1x RS232, 1x J1708	2x CAN, 1x RS485	2xCAN, 1x RS485, USB
ECU values	Fix set	Fix set	Configurable	Configurable	Configurable	Configurable
ECU – fault codes	Displays text or/and numeric codes	Displays text or/and numeric codes	Displays text or/and numeric codes	Displays text or/and numeric codes	Displays text or/and numeric codes	Displays text or/and numeric codes
Displays	Graphic back-lit LCD display 128 x 64	Graphic back-lit LCD display 128 x 64	Graphic back-lit LCD display 128 x 64	Graphic back-lit LCD display 128 x 64, external: 5,7" / 8"	External: 5,7" / 8"	External: 5,7" / 8"
PLC – programmable functions	–	–	•	•	•	•
PC software	LiteEdit, IntelMonitor	LiteEdit, IntelMonitor	IntelMonitor, DriveConfig	IntelMonitor, DriveConfig	IntelMonitor, DriveConfig	IntelMonitor, Drive Config, Logger History, WebSupervisor
IP	Front panel IP 65 Rear side IP 20	Front panel IP 65 Rear side IP 20	Front panel IP 65 Rear side IP 20	Front panel IP 65 Rear side IP 20	IP 69K	IP69K
Engine network capability	Up to 32 engines	Up to 32 engines	Up to 32 engines	Up to 32 engines	Up to 32 engines	Up to 32 engines
History log out	•	•	•	•	•	• (Long history)

KEY

- Included
- Excluded

## Color displays

	IntelVision 5	IntelVision 5 CAN	IntelVision 8	IntelVision 8 Marine	IntelVision 12Touch	IntelVision 17Touch
						
Type	TFT	TFT	TFT	TFT	TFT (IPS)	TFT
Size	5,7"	5,7"	8"	8"	12,1"	17"
Resolution	320 × 240 px	320 × 240 px	800 × 600 px	800 × 600 px	1280 × 800 px	1280 × 1024 px
Touch Layer	–	–	–	–	PCAP	RES
Backlit Display / Intensity control	● / –	● / ●	● / –	● / –	● / ●	● / ●
Front Panel Dimensions	245 × 164 mm	245 × 164 mm	289,5 × 186 mm	289,5 × 186 mm	337 × 232 mm	420 × 358 mm
IP65 Protection – Front / Rear	● / –	● / ●	● / –	● / –	● / –	● / –
Voltage Supply	8–36 VDC	8–36 VDC	8–36 VDC	8–36 VDC	8–36 VDC	9–30 VDC
Consumption	0,7A at 8 VDC	0,7A at 8 VDC	1A at 8 VDC	1A at 8 VDC	2A at 12 VDC	max. 41W at 24V
Operating Temp.	–40 to +70°C	–20 to +70°C	–20 to +70°C	–20 to +70°C	–30 to +70°C	–20 to +60°C
Plug and Play	●	●	●	●	●	●
CAN	–	●	●	●	● <sup>1)</sup>	–
RS485	○	–	●	●	●	–
RS232	○	–	●	●	–	4x
USB Port A / B	– / –	– / –	● / ●	● / ●	2x / ●	4x / –
ETH	–	–	–	–	● (not used)	2x
NFC	–	–	–	–	● <sup>1)</sup>	–
IP65 Connector	–	○	–	–	–	–
Multiple Gen-Set Monitoring	–	–	–	–	–	●
Soft Keys	●	●	●	●	–	–
Internal Buzzer	–	●	–	–	●	–
I/O	–	1x BO (Horn)	–	–	1x AI (Backlight) 1x BO (Horn)	–
Backlit Buttons	–	○	–	–	–	–
Screen Editor	●	●	●	●	● <sup>1)</sup>	–
IntelMonitor	–	–	–	–	–	●
Trends	–	–	●	●	●	●
History	●	●	●	●	●	●
Alarm List	●	●	●	●	●	●
Easy Login	–	–	●	●	● <sup>1)</sup>	–
NFC Tag Management	–	–	–	–	● <sup>1)</sup>	–
User Images	–	–	●	●	●	●
Adjustable Service Screen	–	–	–	–	●	–
Adjustable Status Screen	–	–	–	–	●	–
Editable Setpoint Description	–	–	–	–	●	–
Extended Import / Export Functions	–	–	–	–	●	–
Screen Login Mask	–	–	–	–	●	–
Skins	–	–	–	–	●	–
UL	●	●	●	●	● <sup>1)</sup>	●
Marine certification	–	–	–	●	–	–
Display compatibility	Gen / Sys	●	●	●	● <sup>2)</sup>	●
	Drive DCU	–	●	●	● <sup>1)</sup>	●
	Mobile / Bifuel	●	●	●	–	●

KEY  
● Included  
– Excluded  
○ Optional

1) Available in Q2 2016  
2) IntelVision 12Touch is only compatible with selected IntelSys models. Please visit [www.comap.cz](http://www.comap.cz) for details.

Gen / Sys: IntelGen<sup>NT</sup>, IntelGen<sup>NT</sup> BaseBox, IntelGen<sup>NTC</sup> BaseBox, IntelSys<sup>NT</sup>, IntelSys<sup>NTC</sup> BaseBox. Other models from the IntelGen and IntelSys range are also compatible with this product, please visit [www.comap.cz](http://www.comap.cz) for more details.

Drive DCU: IntelDrive DCU Industrial, IntelDrive DCU Marine  
Mobile / Bifuel: IntelDrive Mobile, IntelBifuel

## Mains protection

	ANSI	IntelPro	MainsPro
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Under/overvoltage and asymmetry (two stage setting)	27, 59, 47	•	•
Overfrequency, Underfrequency (two stage setting)	81H, 81L	•	•
Instantaneous over current, Time over current	50, 51	•	–
Current asymmetry	46	•	–
Earth fault current	50N + 51N	•	–
Ground surge current	50GS + 51GS	•	–
Directional/Reverse power with time delay	32	•	–
Breaker failure		•	•
Phase sequence supervision		•	•
Auto fault reset		•	•
Battery voltage protection		•	•
Synch Check	25	• <sup>1)</sup>	–
Time over current with voltage control	51V	• <sup>1)</sup>	–

KEY • Included  
– Excluded

1) Optional feature, activation via ComAp application. Please contact your nearest ComAp distributor to get more information.

## Communication and extension modules

		ATS	Lite	Compact	Gen / Sys	IntelPro	Drive DCU	Mobile / Bifuel
Communication	CM-4G-GPS	4G Modem / Wireless Internet Module	–	• <sup>1)</sup>	–	–	–	–
	CM-Ethernet	Internet / Ethernet Plug-in Module including Web Server	–	• <sup>1)</sup>	–	–	–	–
	CM-GPRS	GSM Modem / Wireless Internet Module	–	• <sup>1)</sup>	–	–	–	–
	CM-RS232-485	Dual Port Extension Board	–	• <sup>1)</sup>	–	–	–	–
	I-CR	CAN Repeater Module	–	–	•	–	•	–
	I-LB+	Local Bridge	–	•	•	–	•	•
	IB-Lite	Internet / Ethernet Module including Web Server	•	•	•	–	–	–
	ID-COM	Communication Module	–	–	–	–	•	–
	IL-NT GPRS	GSM / GPRS Modem Plug-In Module	•	•	•	–	–	–
	IL-NT RS232	RS232 Extension Board	•	•	•	–	–	–
	IL-NT RS232-485	Dual Port Extension Board	•	•	•	–	–	–
	IL-NT S-USB	Service USB Module	•	•	•	–	–	–
	InternetBridge-NT	Communication Module with Cellular / Ethernet Connection	–	•	•	–	•	•
Extension	EM-BIO8-EFCP	Hybrid Current Input & Binary Input / Output Extension Module	–	• <sup>1)</sup>	–	–	–	–
	I-AOUT8	Analog Output Module	–	–	•	–	•	•
	IC-NT CT-BIO7	Hybrid Current Input & Binary Input/Output Extension Module	–	• <sup>2)</sup>	–	•	–	–
	ID-RPU	Redundant Protection Unit	–	–	–	–	•	–
	ID-SCM	Speed Control Module	–	–	–	–	•	–
	IG-IOM	Analog / Binary Input / Output Module	–	• <sup>2)</sup>	•	•	–	–
	IGL-RA15	Remote Annunciator	–	•	•	–	•	–
	IGS-PTM	Analog / Binary Input / Output Module	–	• <sup>2)</sup>	•	•	•	–
	IL-NT AIO	Analog Input / Output Module	–	• <sup>2)</sup>	–	•	–	–
	IL-NT AOUT8	Analog Outputs for PWM Gauges Module	•	•	•	–	–	–
	IL-NT BIO8	Binary Input / Output Module	•	•	•	–	–	–
	IL-NT IO1	Analog Output and Binary Input Module	–	• <sup>2)</sup>	–	–	–	–
	Intel AIN8	8 Analog Input Channels and 1 RPM/Impulse Input Module	–	–	•	–	•	•
	Intel AIN8TC	8 Analog Channels Module	–	–	•	–	•	•
	Intel AIO9/1	Analog Input Output Module	–	–	•	–	•	•
	Intel IO8/8	Binary Inputs / Outputs and Analog Outputs Module	–	–	•	–	•	•

KEY • Included  
– Excluded

- 1) The product is suitable only for new generation of IntelLite models: IntelLite MRS 11, IntelLite MRS 16, IntelLite AMF 20, IntelLite AMF 25
- 2) The product is suitable only for selected models from the IntelLite<sup>NT</sup> and IntelDrive Lite range. Please visit [www.comap.cz](http://www.comap.cz) for more details.

ATS: IntelATS<sup>NT</sup>  
Lite: IntelLite<sup>NT</sup> AMF 25, IntelLite<sup>NT</sup> MRS 16, IntelDrive Lite.  
Other models from the IntelLite<sup>NT</sup> and IntelDrive Lite range could be also compatible with this product, please visit [www.comap.cz](http://www.comap.cz) for more details.

Compact: IntelCompact<sup>NT</sup>

Gen / Sys: IntelGen<sup>NT</sup>, IntelGen<sup>NT</sup> BaseBox, IntelGen<sup>NTC</sup> BaseBox, IntelSys<sup>NT</sup>, IntelSys<sup>NTC</sup> BaseBox. Other models from the IntelGen and IntelSys range are also compatible with this product, please visit [www.comap.cz](http://www.comap.cz) for more details.

Drive DCU: IntelDrive DCU Industrial, IntelDrive DCU Marine

Mobile / Bifuel: IntelDrive Mobile, IntelBifuel



# New products



## IntelLite MRS 16

- > Single gen-set controller for prime power applications



## IntelLite AMF 25

- > Single gen-set controller for stand-by and prime power applications



## IntelLite Telecom DC

- > DC genset controller for telecom tower applications



## IntelSys<sup>NTC</sup> Hybrid

- > A controller for applications that combine reciprocating gen-sets with renewable source of power



## IntelSys Gas

- > Preconfigured CHP controller for gas engine generator set applications



## IntelVision 12Touch

- > 12" industrial grade touch Plug & Play display



## IntelDrive IPU

- > Industrial power unit controller



## IntelDrive IPC

- > Irrigation pump controller



## IntelBifuel

- > Fully programmable controller designed for any single speed Bi-fuel application



## IntelBifuel DENOX

- > Unique anti knocking engine protection controller specifically designed for Bi-fuel applications



Local distributor / partner:

