

MARINE ANALYTICAL INSTRUMENT PRODUCTS SOLUTIONS

About Us



PT Cakra Sinergi Kreatif is a general supplier and system integrator company that focuses on marine needs. We provide various supplies of goods from the marine industry with excellent quality and at competitive prices. As a system integrator, we provide monitoring needs in the marine industry. Through the MANTRAZ (Marine Trend Analyzer) system we are here to provide solutions and analysis and monitor ship activities in real time so as to facilitate client operational activities in terms of ship monitoring.



Vision

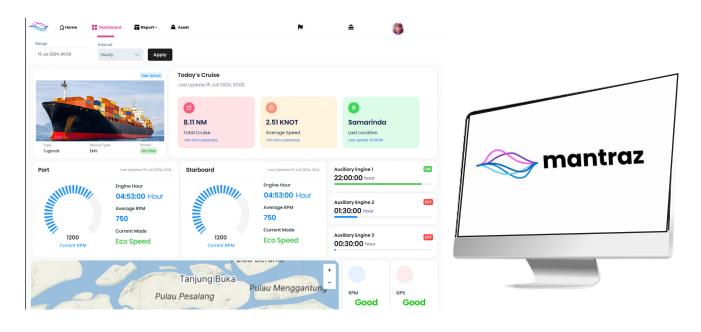
To be a trusted and integrity company in the marine industry, and to be a partner that is able to provide the best service to clients in various monitoring and data analysis system needs.



Mision

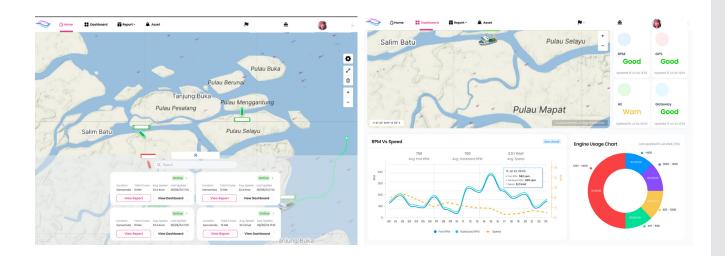
- 1. Provide a variety of goods and services of good quality at competitive prices
- 2. Provide remote monitoring services through a system integrated on the ship.
- Provide relevant data analysis to be able to be used by stakeholders to make decisions.
- 4. Provide one-stop service to clients
- 5. Provide optimal after-sales service as a form of our desire to move forward together in business.
- 6. Provide solutions to clients in increasing the use of IT
- 7. Become the main partner of the moni toring system service business

MANTRAZ is an integrated system that can analyze various events read through sensors that have been installed and integrated. Through the **MANTRAZ** system, users can monitor and get further analysis of the data read on the installed sensors.

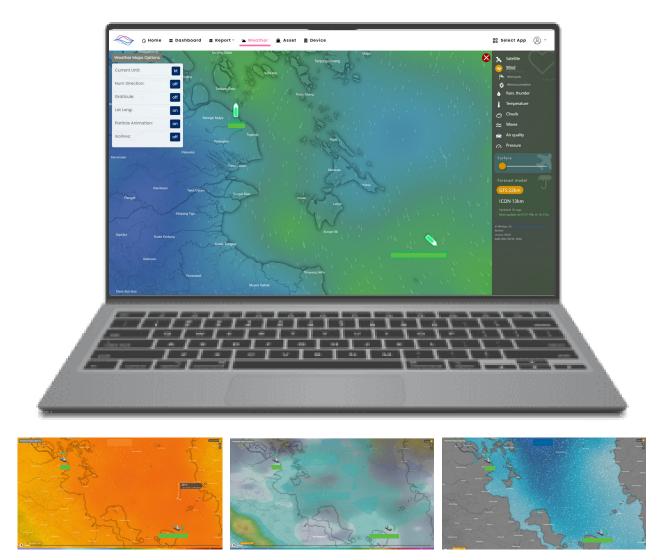


Key Selling Points



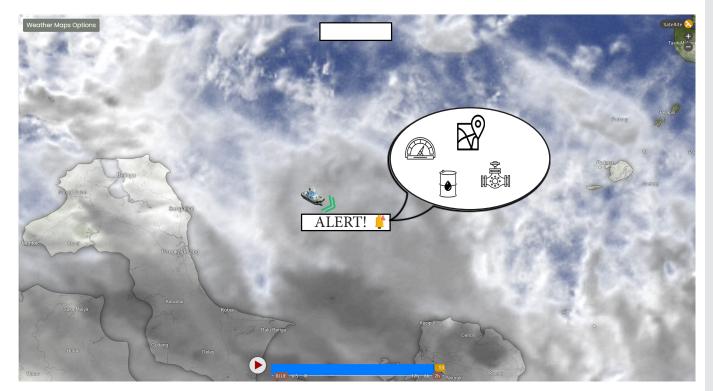


Built with Forecasting Maps



users can easily get various kinds of weather forecasting features and various other map features.

Find out important things quickly with the Alerts feature



Alerts can make it easier for users to monitor efficiently. There are several alerts parameters including:

- 1. Alerts on main engine conditions
- 2. Alerts on various machine conditions AE
- 3. Alerts on signal indicators
- 4. Alerts at certain speeds
- 5. Alerts on panel opening
- 6. etc

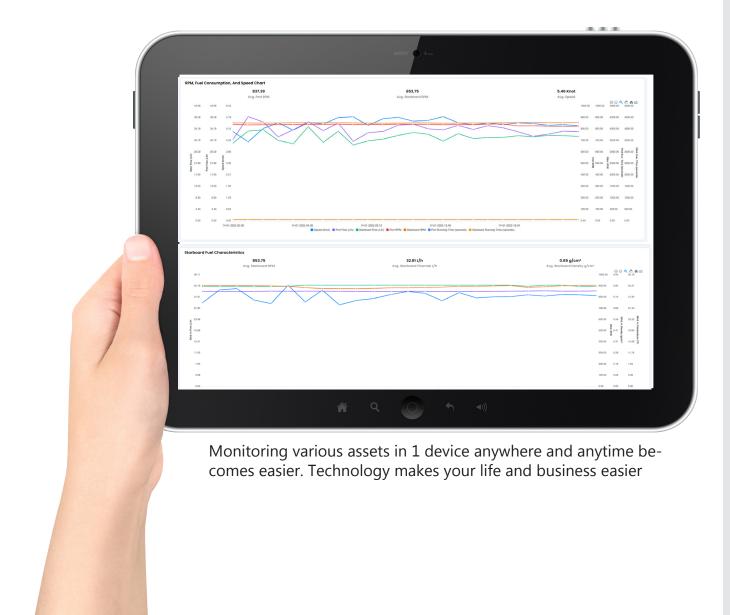


Capturing the data quikly and precisely

ect Range 1/14/2025 00:00 - 01/14/20	25 23:59	Minute 🕓	Today	Asset		Apply	Download XL	sx				
eed Unit Distance Unit	Sort Data By											
KNOT V NM V	Oldest v Filt	er Column	ן									
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									PORT			
Date Time	Coordinate	е	Heading	Speed (KNOT)	Cruise (NM)	RPM	Run. Hours	Volume To (Liter)		In FLow (L/H)	In Temp. (°C)	IN Density (g/cm³)
2025-01-14 00:00:00	1º 10' 24" S, 105º 5	51' 55" E	115.55°	5.04	0.09	841.88	00:01:00	1851.8	34	39.18	34.12	0.84
2025-01-14 00:01:00	1º 10' 27" S, 105º 5	51' 59" E	115.86°	4.99	0.08	840.94	00:01:00	1852.3	38	36.43	34.12	0.84
2025-01-14 00:02:00			116.22°	4.92	0.08	837.86	00:01:00	1853.0	90	34.46	34.11	0.84
2025-01-14 00:03:00			117.38°	5.04	0.08	840.00	00:01:00	1853.6	52	35.57	34.11	0.84
2025-01-14 00:04:00			119.34°	5.12	0.08	840.94	00:01:00	1854.2		34.16	34.10	0.84
2025-01-14 00:05:00	1º 10' 36" s, 105º 5		120.53°	5.17	0.09	840.00	00:01:00	1854.8		32.65	34.10	0.84
2025-01-14 00:06:00	1º 10' 38" S, 105º 5		121.53°	5.25	0.08	839.06	00:01:00	1855.4	1855.47 3		34.10	0.84
2025-01-14 00:07:00	1° 10' 41" S, 105° 5		120.96°	5.25	0.09	841.07	00:01:00	1856.0		36.00	34.10	0.84
2025-01-14 00:08:00	1º 10' 44" S, 105º 5		120.25°	5.19	0.09	840.00	00:01:00	1856.6	52	36.74	34.11	0.84
2025-01-14 00:09:00	1º 10' 47" S, 105º 5		120.03°	5.26	0.09	840.94	00:01:00	1857.2		35.69	34.10	0.84
2025-01-14 00:10:00	1º 10' 49" S, 105º 5		120.57°	5.11	0.09	841.88	00:01:00	1857.8		38.53	34.10	0.84
2025-01-14 00:11:00	1º 10' 52" S, 105º 5		119.81°	5.08	0.08	839.06	00:01:00	1858.4	47	37.62	34.10	0.84
2025-01-14 00:12:00	1º 10' 55" S, 105º 5		118.71°	5.06	0.08	842.14	00:01:00	1859.0	92	39.34	34.10	0.84
2025-01-14 00:13:00	1º 10' 57" S, 105º 5	2' 52" E	118.70°	5.08	0.09	838.13	00:01:00	1859.6	53	34.99	34.10	0.84
2025-01-14 00:14:00	1º 10' 60" S, 105º 5	2' 56" E	119.23°	5.11	0.08	841.88	00:01:00	1860.2	26	37.12	34.10	0.84
lain Engine RPM Summary								A	uxilliary E	ngine Summary		
RPM Summary	Value	Unit		RPM Summary	Value		Jnit		Data Sum	mary Hour	Fu	el Cons.
Average Port RPM	837.39	RPM		Average Starboard R	PM 853.75		PM		AE1	12:01:0	00 48	07 Liter
Port Engine Running Hour	23:56:00	Hour		Starboard Engine Ru	ning 23:56:00		lour		AE 2	11:57:5	52 47.	86 Liter
• •				Hour					AE 3	00:00	:00 0.0	0 Liter
									Total	23:58	:52 95.	92 Liter
fain Engine Fuel Summary								F	uel Consu	mption Summary	,	
Fuel Summary	Value	Unit		Fuel Summary	Value		Jnit		Fuel Sumn	nary Value	ə Un	it
Port Fuel Cons	853.52	Liter		Starboard Fuel Cons	785.72		iter		ME Fuel Co	ins 1639.3	24 Lite	ər
Port Flow Time	23:58:00	Hour		Starboard Flow Time	23:57:00		lour		AE Fuel Co	ns 95.92	Lite	Pr -
Port Fuel Flow	35.61	L/h		Starboard Fuel Flow	32.81		/h		Total Fuel	Cons 1735.1	16 Lite	ər
						Padar	9	G	PS Summ	ary		
									Average Sp	eed 5.46	к	NOT
									Total Cruise	130.33	3 N	м
→ Sungai Liat K Sempan Pariptapin				A)								
X Sempan			•	ن الريمي								
→ Sunga Lar Sempan Penghalon Banoebeloetang			•	لإلى								
→ Sunga Lar Sempan Penghalon Banoebeloetang	Lubuk Besar		•	Sungapadang								

MANTRAZ combines the accuracy of installed sensors with powerful system elements to produce relevant data in accordance with the real situation.

Keep track of your assets at a glance



FUEL MONITORING SYSTEM



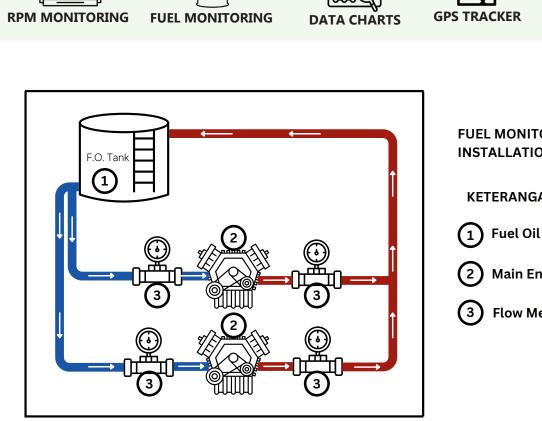
What's Monitored:

- 1. Monitor Main Engine RPM by installing a readout sensor.
- 2. Monitoring Fuel on the main engine by installing a flowmeter on the engine piping line
- 3. Monitor distance, speed and location in real time.
- 4. Provide analysis of captured data

Benefits of Implementing

- 1. Optimized repair and maintenance cost
- 2. Monitoring asset precisely
- 3. Monitor distance, speed and location in real time.
- 4. Provide analysis of captured data





FUEL MONITORING SYSTEM **INSTALLATION SCHEME**

DAILY REPORTING

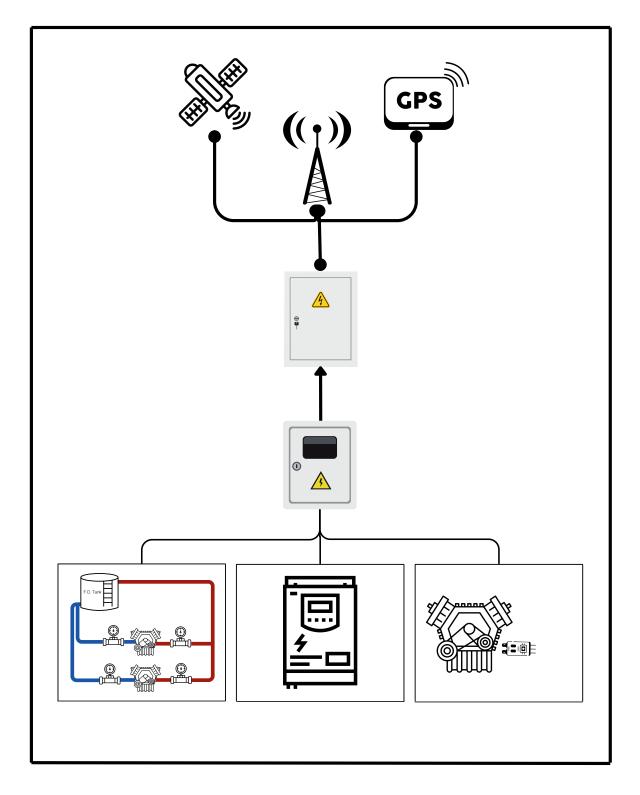
KETERANGAN

Fuel Oil Tank

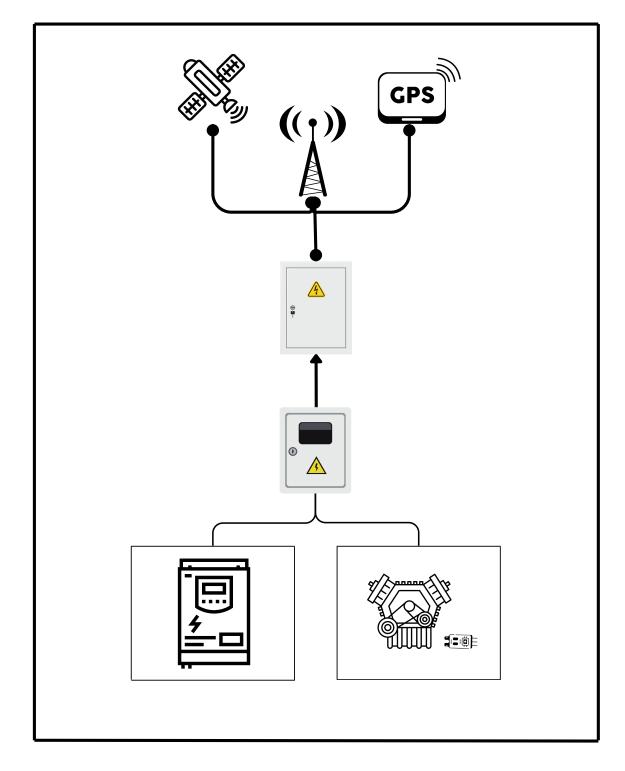
Main Engine

Flow Meter

System Topology



System Topology



ENGINE MONITORING SYSTEM

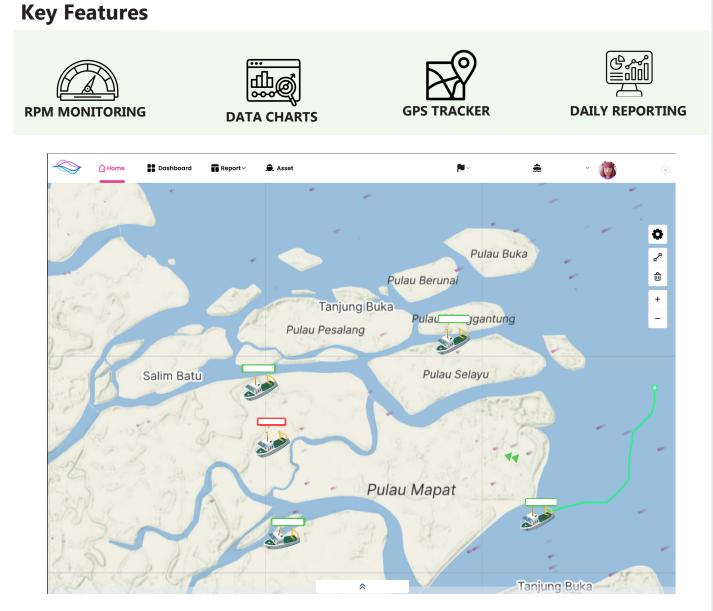


What's Monitored:

- 1. Monitor Main Engine RPM by installing a readout sensor.
- 2. Monitor distance, speed and location in real time.
- 3. Provide analysis of captured data

Benefits of Implementing

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- 2. Monitoring asset precisely
- 3. Monitor distance, speed and location in real time.
- 4. Provide analysis of captured data



SOLUTIONS

BUNKER MONITORING SYSTEM



What's Monitored:

- 1. Monitor incoming fuel oil
- 2. Know the temperature and density of fuel oil
- 3. Place and time of fuel tank fill-up
- 4. Monitoring all of the process bunker

Benefits of Implementing

- 1. Moitoring bunker precisely
- 2. Present real time data of bunker process

Key Features



SOLUTIONS



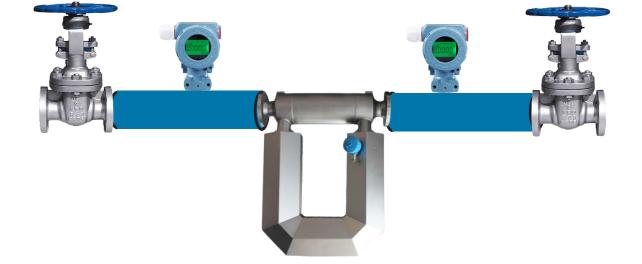




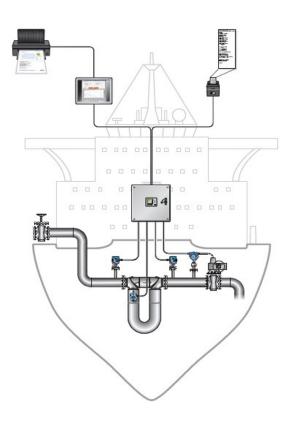
MONITORING BUNKER

DATA CHARTS

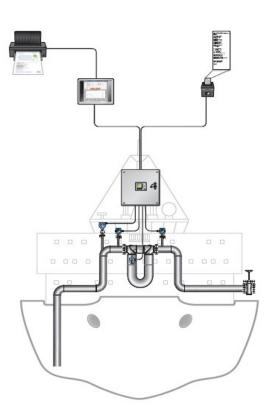
BUNKER TRANSACTION

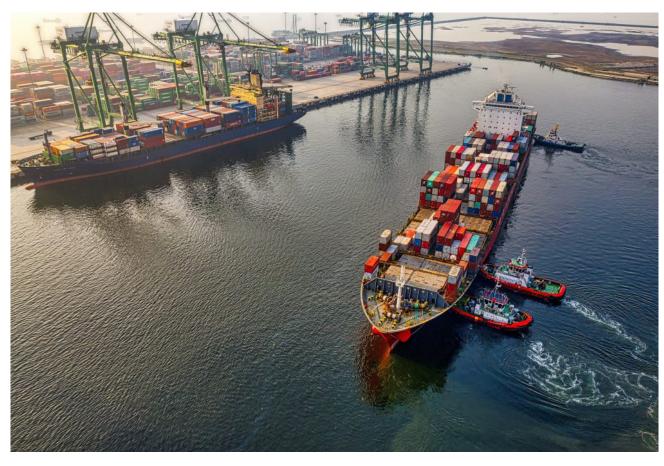


VESSEL INSTALLATION



BARGE INSTALLATION





FLOW METER

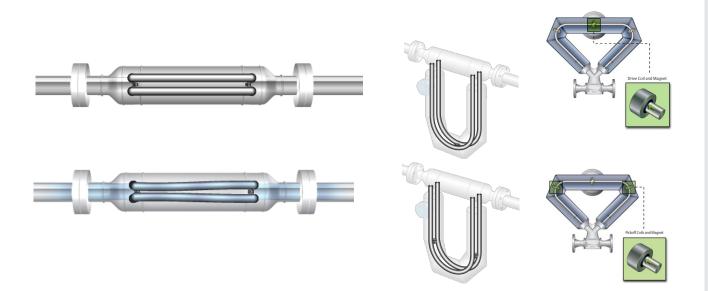


Mass flow meter is a device that measures the mass of a fluid traveling through a tube, in accordance with Coriolis Principle. Coriolis mass flow meter can directly measure fluid mass flow, and has great influence on processing and measuring methods in energy & chemical industries. Compared with traditional volumetric flow measurement, it has following advantages:

- 1. High accuracy: Generally from 0.1 % 0.5%.
- 2. Wide application: Besides common fluid, mass flow meter can measure fluids such a non-Newtonian fluid, all kinds of slurry, suspensions, etc.
- 3. Convenient installation: No specific requirement of choosing upstream or downstream pipe.
- 4. High reliability

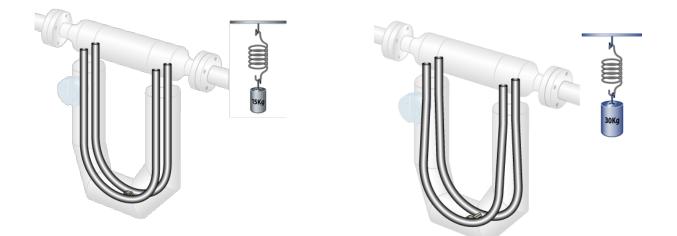


Theory of Operations - Mass Flow Measurement



- 1. Process fluid enters the sensor and flow is split with half the flow through each tube
- 2. Drive coil vibrates tubes at natural frequency
- 3. Pick-off coils on inlet and outlet sides

Theory of Operations - Direct Density Measurement



Density measurement is based on the natural frequency As the mass increases, the natural frequency of the system decreases As the mass decreases, the natural frequency of the system increases

SERVICES

General Services

We provides general maintenance services required by vessels in support of their business.

Troubleshooting Services

Our service engineers can perform troubleshooting both on site and online.

Technical Support

Assistance to Our customers with selecting proper product and configuring it for a specific case.

Installation Supervision

Our Team can come to your location, to made an example installation and guide the technicians through whole process

Online Training

Our Support engineers can make the training from online base







For further information, please scan the barcode above to connected with us.

	: www.cakrasinergikreatif.com
Email	: customercare@caksrasinergikreatif.com
	: 62 8531 2841 252
NPWP	: 19.921.764.7-447.000
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