



Intelligent Robotics System Solutions



Solutions for Infrastructure, Utilities, and Marine Environments

About IROSS

Who We Are

IROSS SDN BHD is a Malaysian robotics solutions company specializing in inspection, monitoring, and maintenance robots for infrastructure, utilities, and marine environments

We help asset owners and operators replace high-risk, labor-intensive manual inspections with robotic systems that improve safety, reduce cost, and minimize operational disruption.

Why IROSS

- Safer Inspections without human entry
 - Faster deployment with proven platforms
 - Flexible service model (RaaS & EaaS)
 - Local customization (software and hardware)



Reach Us

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Our Solutions



Pipe & Culvert Inspection



Water Tank Inspection



Underwater ROV Inspection

Our Solutions



Pipe & Culvert Inspection	Water Tank Inspection	Underwater ROV
<p>Overview</p> <p>IROSS deploys robotic inspection systems for drainage systems, culverts, and pipelines commonly found in expressways and urban infrastructure. The robots identify defects and blockages without excavation or service disruption.</p>	<p>Overview</p> <p>IROSS offers non-draining robotic inspection for potable and industrial water tanks, allowing inspections to be conducted without interrupting water supply.</p>	<p>Overview</p> <p>IROSS provides underwater inspection solutions using remotely operated vehicles (ROVs) designed for submerged and marine environments. These systems eliminate the need for divers in hazardous conditions while delivering high-quality visual data and inspection reports.</p>
<p>Typical Applications</p> <ul style="list-style-type: none">Expressway drainage and culvertsStormwater and sewer pipelineMunicipal infrastructure	<p>Typical Applications</p> <ul style="list-style-type: none">Potable water tanksIndustrial storage tanksMunicipal water facilities	<p>Typical Applications</p> <ul style="list-style-type: none">Water tanks and reservoirsPorts and marine structuresSubmerged foundations and assets
<p>Key Benefits</p> <ul style="list-style-type: none">Early detection of cracks, deformation, and blockagesReduced inspection cost and manpowerFaster decision-making for maintenance planning	<p>Key Benefits</p> <ul style="list-style-type: none">No tank draining requiredSafe inspection for potable water environmentsRegulatory-compliant inspection documentation	<p>Key Benefits</p> <ul style="list-style-type: none">Improved safety with zero human entryLive video and recorded inspection footageFaster inspections with minimal downtimeCompliance-ready reporting

Industries We Serve

Expressways

Robotic inspection of culverts and drainage systems for expressways, reducing lane closures, inspection time, and safety risks to maintenance teams.



Ports & Marine

Underwater inspection of marine structures and submerged assets, reducing reliance on divers and improving safety in high-risk environments



Water Utilities

Non-draining inspection of water tanks, pipelines, and reservoirs, enabling utilities to maintain service continuity while meeting regulatory requirements



Local Councils

Cost-effective inspection of urban drainage systems and culverts, supporting preventive maintenance and improved asset management.



Our Customers & Partners



Our Team



IROSS is led by a technically driven founder supported by a lean, multidisciplinary team with expertise in:

- **Robotics and mechanical engineering**
- **Software development and system integration**
- **Field operations and inspection services**
- **Project management and business development**



Founder & CEO

Prof. Ir. Ts. Dr. Mohd Rizal Arshad is a Malaysian academic and technologist with extensive experience in engineering research, innovation, and technology commercialization

Board of Directors



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Azmin Sundi@Suandi



En Syamsul Nizam Azmee



En Mohd Ruslan Ahmad

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Lee Chang Hong



Ans Alaa Al-Sarabi



Zhang Shuo

Researchers

Our Consultants



Associate Professor Ir. Dr. Rosmiwati
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Expertise in System Modelling and Control,
Mechatronic Application

School of Electrical & Electronic Engineering
Universiti Sains Malaysia



Associate Professor Dr. Muhammad
Nasiruddin Mahyuddin

Expertise in Model-Free Adaptive Control,
Cooperative Control, Nonlinear Robotics Arm
Control, Mechatronics System Design, Robotic
Arm

School of Electrical & Electronic Engineering
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Dr Abdul Sattar Din

Expertise in Robotics, Automation, Mechatronic, &
Soft Robotic

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