

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**
<https://iross.my>
info.irosshq@iross.my



Our Solutions



Pipe & Culvert Inspection



Water Tank Inspection



Underwater ROV Inspection

Our Solutions



Pipe & Culvert Inspection	Water Tank Inspection	Underwater ROV
Overview 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.	Overview IROSS offers non-draining robotic inspection for potable and industrial water tanks, allowing inspections to be conducted without interrupting water supply.	Overview 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.
Typical Applications - Expressway drainage and culverts - Stormwater and sewer pipeline - Municipal infrastructure	Typical Applications - Potable water tanks - Industrial storage tanks - Municipal water facilities	Typical Applications - Water tanks and reservoirs - Ports and marine structures - Submerged foundations and assets
Key Benefits - Early detection of cracks, deformation, and blockages - Reduced inspection cost and manpower - Faster decision-making for maintenance planning	Key Benefits - No tank draining required - Safe inspection for potable water environments - Regulatory-compliant inspection documentation	Key Benefits - Improved safety with zero human entry - Live video and recorded inspection footage - Faster inspections with minimal downtime - Compliance-ready reporting

Industries We Serve

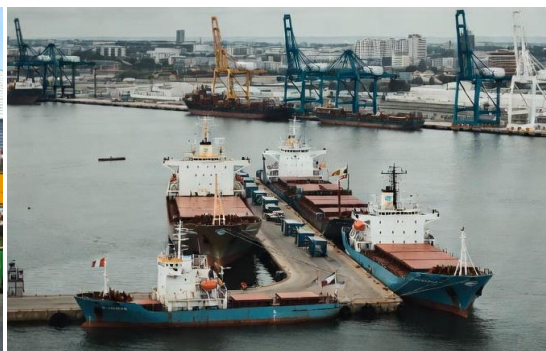
Expressways

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

Manager



En Mohd Ruslan Ahmad

Researchers



Lee Chang Hong



Ans Alaa Al-Sarabi



Zhang Shuo

Our Consultants



Professor Ir. Ts. Dr. Shahrel
Azmin Sudi@Suandi

Expertise in Artificial Intelligence (AI),
computer vision, image processing,
biometric systems, and intelligent
surveillance technologies

School of Electrical & Electronic
Engineering
Universiti Sains Malaysia



Associate Professor Ir. Dr.
Rosmiwati Mohd Mokhtar

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
Universiti Sains Malaysia



Dr Abdul Sattar Din

Expertise in Robotics, Automation,
Mechatronic, & Soft Robotic

School of Electrical & Electronic
Engineering
Universiti Sains Malaysia