orbis/systems

WE CALL IT KNOWLEDGE

Orbis Systems India

Test Systems and Solutions

Fixtures and Adaptors

Machine Vision Offerings

Signal Switching Units

Cable Assemblies & Wiring Harness

About us

Orbis (India) Pvt. Ltd. is wholly owned subsidiary of Orbis Systems Oy. Orbis Systems Oy is a Finnish company headquartered in the city of Vantaa. Orbis India began its Operations in Chennai in October 2005.

Orbis provides innovative engineering design and cost competitive application solutions for quality control, testing and measuring solutions and support services tailored for customer's R&D, production and after sales needs. Our capabilities include different types of test solutions including Automated Test Equipment (ATE), Signal Switching Units, Machine Vision Systems, Fixtures and Adaptors, Specialized Cable Assembly & Wiring Harnesses and electromechanical assembly/ modules. Our customers are from all industries having electronic modules viz., mobile, base station, automotive, power, medical and other electronics

Orbis develops its own products, systems and services. It also partners / collaborates with industry leading OEMs to deliver project solutions to complement our offerings.

Established in 1949, we have delivered 1000's of mobile phone, base station and machine vision test systems, 30,000 km of cable, 120 million pieces of components and 1000's of measuring instruments worldwide for our customers.

1949	Founded
1970	Professional Electronics
1993	Own Production
1995 – 2004	Global Operations Americas, Estonia, China, Sweden
2005	Orbis India Operations
2013	Vietnam Service Operations

Headquartered in Finland, Orbis has subsidiaries in Sweden, Estonia, USA, China and India

In addition Orbis is also now a "**National Instruments System Integrator/ Value Added Reseller** partner & working towards being an Alliance Partner of NI". This further strengthens Orbis Competencies as a complete solution provider – in bringing best of customized solutions & services to our customers for various markets.

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WE CALL IT KNOWLEDGE

Signal Switching Unit

Introduction

✓ Customized to meet all needed connections for entirely automated testing environments

✓ SSU enables efficient and accurate measurements with good repeatability.

✓ Shortens product verification time during product development project.

✓ Faster production time

✓ Leads to significant cost savings.

Target Applications

✓ GSM/ EDGE/ WCDMA/ WiMAX / LTE carrier freq., performance measurements

✓ Narrow band application specific switching

✓ Wide band general purpose switch matrices

✓ High dynamic range measurements

✓ RF unit/module testing in R&D and production

✓ Performance test systems in R&D, Antenna testing, Filter testing, Power amplifier testing

Specifications

✓ Frequency ranges from DC - 18 GHz;

✓ RF power level: up to + 53 dBm;

✓ Remotely controlled via GPIB, USB, UDP/IP or TCP/IP

✓ Chassis: 19" Rack mountable. Height: 2U, 3U, 4U, 5U, 8U or 10U (1U = 44,45 mm)

✓ Basic: Relay counter; Temperature monitoring; Forced / Smart cooling;

Features

✓ SSU Software w/ Configurator & Monitor Options

✓ High Performance Chassis: High shielding efficiency (emission and immunity) for demanding applications with wide dynamic range of signals

✓ Standard Chassis: Proper shielding and cost efficiency for standard applications

✓ Customized Chassis for volume units (> 10 units): Adequate shielding and cost efficiency for standard applications

✓ Modular platform based designs in Multiple variants: Pluggable Card based (ex. Filter banks) and Pluggable module based (Relay, amplifier modules)

Test System / ATE

Introduction

✓ Complete solution: From Concept to full systems

✓ Solution Development: Own / with partners

✓ Hardware & / Software

✓ Prototyping & Bulk production

✓ DUT Specific Fixtures & Adaptors;

✓ Test System & Rack Solutions: System Integration

✓ Scalable Manufacturing Capacity

Target Applications

✓ General Automation

✓ Switching, Signal routing

✓ Test & Measurement

✓ Functional Verification

✓ Data logging & management

✓ Measurement, test and control system applications in all domains

✓ Performance, in-circuit & / Functional test

Target Customers

✓ Automation

✓ Base Station manufacturers

✓ Mobile phone manufacturers

✓ Automotive manufactures

✓ Cable Assembly / Wiring Harness manufacturers

✓ Power System, Energy & related applications

✓ Robotics & Control

✓ Other Electronics & Module manufacturers

Fixtures and Adaptors

Introduction

✓ Customized to meet all needed connections for entirely automating the testing

✓ Test Points can include bed of nails for:
   Low signal,
   High current
   High frequency and
   Specialized applications

✓ Adaptor matings could be RF, standard or quick tmates

Target Applications

✓ Performance, in-circuit & / Functional test

✓ Hi-Pot testing

✓ Battery testing

✓ Filter module testing
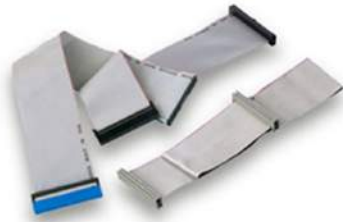
✓ Power amplifier testing

Target Customers

✓ Automation

✓ Base Station manufacturers

✓ Mobile phone manufacturers

✓ Automotive manufactures

✓ Cable Assembly & Wiring Harness manufacturers

✓ Power System, Energy & related applications

✓ Robotics & Control

✓ Other Electronics & Module manufacturers

Cable Assemblies

Introduction

✓ RF Cables: Upto 18GHz, Standard connectors, Low loss, Phase matched types

✓ Higher frequencies and other types are available on specific request

✓ Customized Cable Assemblies for ATE & Fixture applications

✓ Power & System Control Cable Assemblies

✓ Data, Communication & Signal Cable Assemblies

✓ Wiring harnesses

Target Applications

✓ Telecom & Datacom

✓ Automation / Robotics

✓ Control Electronics

✓ Defence / Aerospace

✓ Medical Diagnostics

✓ Shipboard Marine

✓ Others - Special applications

Facilities

✓ Schleuniger fully automatic & semi automatic coaxial cable cutting & stripping machines

✓ Olympus optical microscope for visual Inspection

✓ Network analyzer for RF measurements (IL & RL)

✓ Cirris tester for continuity, short / open & HT test

Sylvac Interface Measurement

✓ Tools, adaptors & fixtures for wide variety of connectors & cable types

✓ Dedicated Cable assembly lines with Scalable capacity

Machine Vision

Introduction

✓ Vision System - Hardware & Software

✓ Test Systems using Vision technology

✓ Application development (Customized) with Customer

✓ High speed & application specific Cameras, Special components used in Vision applications viz., Lighting arrays, Lenses, Smart Cameras

Orbis Vision Platform (OVP)

✓ OVP is an integrated vision system software with customized vision inspection libraries and vision tools for delivering optimzed results

✓ Constantly developed by Orbis, this is a 3rd generation software.

✓ Modular design platform ensures easy integration to customer application and faster application development

Target Applications

✓ Automation application viz., Robotic guidance, Identification, Labeling

✓ Functional testing

✓ Visual inspection for scratches; finish

✓ Assembly verification of Visual Defects viz., missing components, correct assembly

✓ Quality

✓ LCD / LED quality; Colour Calibration; Product traceability – tracking; Inspection under special circumstances;

Advantages

✓ Machine Vision Systems allow manufacturers to Improve quality and increase productivity

✓ Avoid Human inspection errors.

✓ High speed, high magnification and round the clock operation

✓ Reduce costs: Achieve near zero defect production

✓ Monitor environment and take decisions accordingly and automatically

✓ Higher level of customer satisfaction

Support Services

Operating globaly, acting locally

- ✓ Manufacturing equipment onsite integration
- ✓ Commissioning / ramp up / installations
- ✓ Modifications/ Upgrades
- ✓ Production line transfers
- ✓ Maintenance support
- ✓ Spare part support
- ✓ Repair and calibration with partners
- ✓ Trainings – Operator, Technician

Latest **TECHNOLOGY** with **LOCAL SUPPORT**