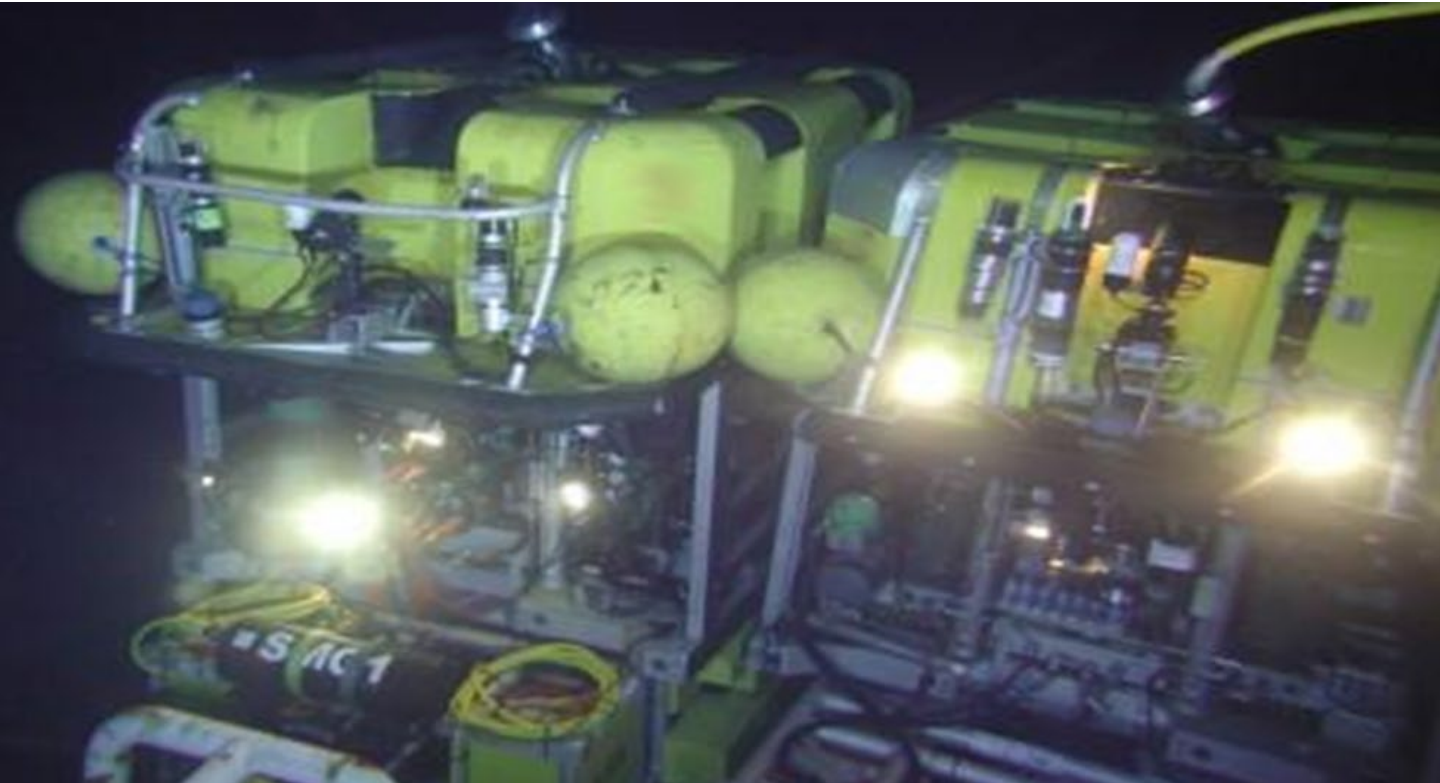


Subsea Electrical Test System SETS™



Measurement Capability

- Live Test Data feed
- IR Insulation Resistance
- CR Continuity testing
- TDR testing
- OTDR Testing

Electrical Integrity and Safety

- Umbilical
- Jumpers and EFLs
- Part of a suite of subsea test tools

Typical Use

- Fault finding on aging fields
- Gradual decay assessment
- Post lay testing
- Pre-commissioning test
- Field extension verification

Deployment

- Deployed in 3 small cases
- Minimal integration setup
- Simple and quick results

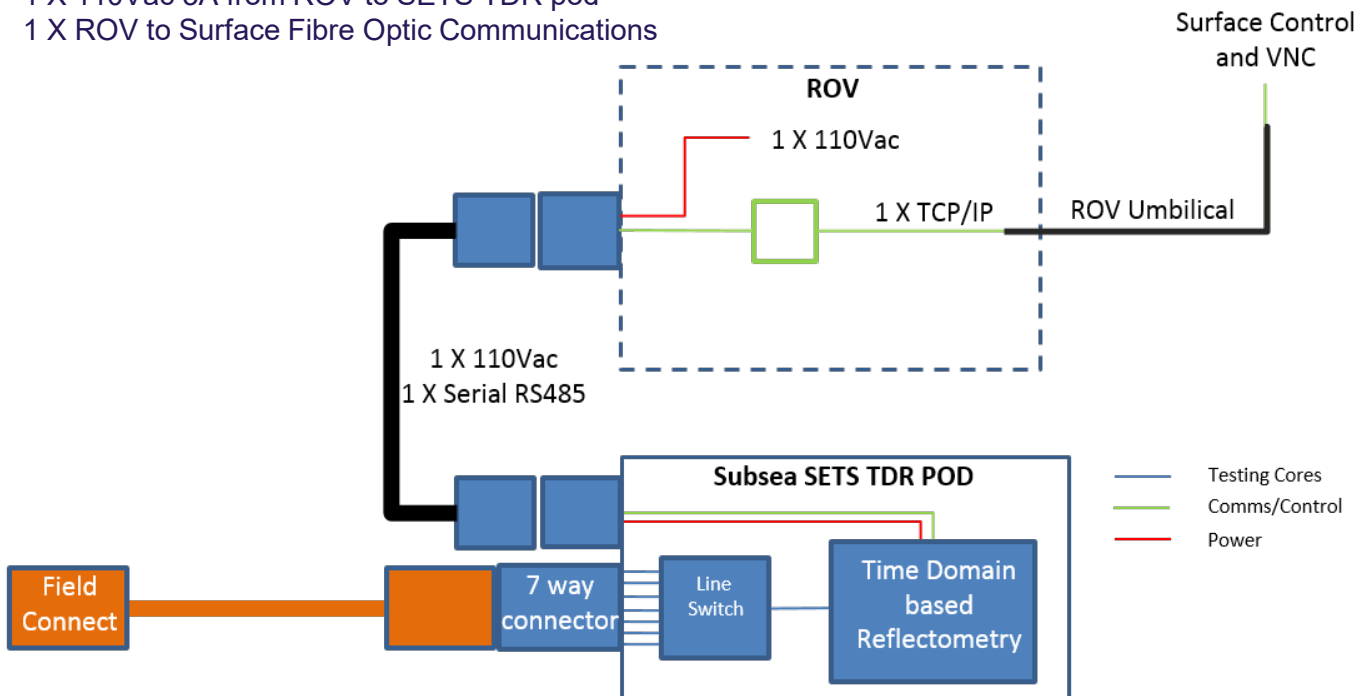


Specification

Specification	Rating	Notes
Depth (POD)	3000MSW	
Power (POD)	110VAC 3A	
Communications (POD)	TCP/IP 10/100 VNC RS485/RS422 serial	Requires 1 ROV to surface communications mode
Power /Comms Connection	25 Way Burton	POD to ROV
Field Connect	To suite field – Tronic, ODI etc.	Test cable connects to Seacon on TDR Pod
TDR Test Distance	2m to 64kM (11 Discrete ranges)	Dependant on VOP
Number of lines	7 Copper	Option for 12 lines
Voltage	10V matched - 20V peak (Open Circuit)	
Pulse Width	Adjustable 10nS to 50uS	
Sample rate	Upto 800MHz	
Effective Dynamic Range	80dB	
Velocity of Propagation	33.33% to 99.99% VOP	
Resolution (distance)	0.01% to 0.02%	Distance Dependant
Scan time	Variable	Dependant on cable length and chosen resolution.
Uncertainty (Distance) m	Variable based on chosen range setting and pulse width	125mm to 8000mm dependant on range and pulse width chosen
Data on	Open, Short, pinched and crushed, splices, water ingress/damage	Visual line display and textual information
Criteria	Pass and Fail based on Attenuation	Visual Indication
Temp, Operating	-20° to 40°C	-20° to 55°C Storage

Connection Requirement

- 1 X 110Vac 3A from ROV to SETS TDR pod
- 1 X ROV to Surface Fibre Optic Communications



Software

- PC Based Software
- Ethernet TCP IP Communications
- Windows 7,8 10
- Full remote test setup and start stop control
- Live (Near Real time) data trend
- IEC standard pass fail criteria (manual client criteria option)
- Data Export

