

PCS 1000 subsea control system

A new yet field proven solution for shallow water, cost sensitive fast track developments

Key features & benefits

The PCS 1000 is a complete control system comprising both topside and subsea located hardware together with the necessary software. The system has been designed with standardization as a prime objective resulting in a product range offering very short delivery times that will meet the needs of shallow water, cost sensitive and fast track developments.

Subsea Control Module (SCM)

The PCS 1000 SCM is an electro-hydraulic module responsible for the control and monitoring of subsea valves and sensors. The PCS 1000 SCM is designed for a diver assisted subsea installation, with options for Remotely Operated Vehicle (ROV) operated interfaces available.

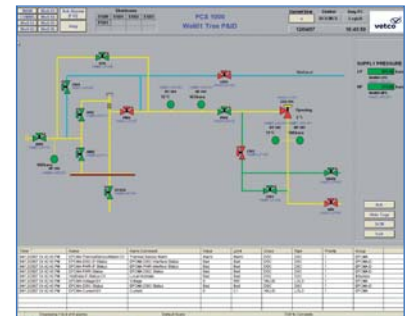


Item	Description
Pressure rating	LP-345 bar MWP HP-690 bar MWP
Functions	LP-14 channels HP-1 channel
Supply	Single LP Single HP
Temperature range	-18 °C to +40 °C (Operating)
Maximum operating depth	300m
Accumulation	LP20 liters
Filtration	Integral on LP and HP supply
SEM communications	Communication superimposed on power system 57.6kbps Supply pressures Function line pressures
Internal telemetry	Housekeeping 'integrity' monitoring 4-20mA-8 channels Profibus-1 channel
External telemetry capability	Down hole gauge interface - fitted as required
Weight	1200 kg (in air), 950 kg (in water)
Size	1106 x 680 x 1155 mm



Master Control Station (MCS)

The MCS 1000 is a 19" rack mounted system that provides control of up to six subsea wells. It provides the operator interface as well as control logic, interlocks and event logging. The standard system is non-redundant, a redundant PC configuration is an option. Communication with the subsea equipment is based on VetcoGray's market leading high speed powerline signaling technology. Optional Supervisory Control and Data Acquisition/ Distributed Control System (SCADA /DCS) interfaces can be provided via modbus over an ethernet link.



Item	Description
Cabinet dimensions	1.2m x 0.6m x 0.8m (h x w x d)
Operating range temperature	5 to 40 °C
Subsea power supply	Conditioned 200 to 600V AC with line insulation monitoring
Subsea communication	TC57 protocol, 57.6 k baud
ESD / PSD	Up to 4 Emergency Shut Down (ESD) and 1 Process Shut Down (PSD)
Other software functionality	Interlocks, alarms, trending
Options	Valve profiling, Distributed Control System (DCS) interface



GE imagination at work