



Infrastructure name	MULTICHANNEL SEISMIC SYSTEM
Code	PS
Owner/Institution	AWI
Manager	Wilfried Jokat Wilfried.Jokat@awi.de
Equipment type	SEISMIC
System description	Multichannel full operation seismic system
WEB LINK	none
WEB LINK TECH SPECS	
Vessels normally used	FS Polarstern, Meteor, Sonne, MSMerian
Ship requirements	Huge main deck to install containerized equipment and stern crane/A-frame deployment/There are no compressors supplied
Technical requirements	Hydraulic power and up to 600 ACV power
Power	
Frequency	50hz/60 hz
Voltage	220 VAC - 400 VAC - 600 VAC
Other power requirements	Workshop 3 Phase Supply - 220 VAC and 400VAC 32A. LMF compressors 600 VAC.
Hydraulic	
Pressure	210 BAR
Flow rate	TBC
Compressed air requirements	Description is only valid for FS Polarstern
High air compressor	1 x LMF 31/200 -50E
Input pressure	
Output pressure	140 bar - 2000 psi up to 207 - 3000 psi
Air volume	31 cbm/min
R.P.M.	Controlled by frequency variator
Cooling sea water	
Vessel GPS Feed or other requirements	GPS (GGA and ZDA messages)+ Gyro + Nadir Depth desired input data from vessel equipment 20 squared meters laboratory to install acquisition room
Source definition	
Source structure	Airguns
Airguns Types	SERCEL GI-Guns (3) and G-Guns (8x520 cbinch)
Bolt chamber volumes	
Sleeve chamber volumes	
GGUN-II chamber volumes	
Streamer	
Multichannel streamer	Sentinel Sercel® up to 240 channels, 3 kilometers active sections length. Solid state streamer.
Streamer winch	Hydraulic winch
Fairlead	

Acquisition System	
Data acquisition	SEAL 408XL up to 2000 channels
Positioning system	Navipac by EIVA
Birds/Levellers	DigiCourse Acoustic Birds
Compass & Retrievers	DigiCourse Compass
Tailbuoy	
Number of containers/items, Footprint Area required	
LMF compressors	installed on the vessels
Source structure	
Streamer Winches	1 x 20' standard Container; 19 to Winches NON-Standard (not containerized)
Acquisition Lab	Provided by the vessel
Workshop	20' Standard container
Deck securing arrangements	
Deck requirements	Containers twist locked into standard iso 20', stern hydraulic Aframe with snatch center system to control fairlead height
Transportation requirements (total weight and number of loads)	
LMF compressors	none
Source structure	1x 20' Containers Spareparts etc
Streamer Winches	1x20' container with the hydraulik unit; 1x 19 to winch. No container size
ACquisition Lab	None, provided by the vessel
Workshop	20' Standard container = 12 Tones
Mobilisation Details	
Typical Mobilisation duration	5 days mobilisation and configuration
Typical Mobilisation cost	
Typical Demobilisation duration	3 days
Typical Demobilisation cost	
Insurance arrangements	
Own use	A global insurance for ship and hull and deck equipment. No insurance for deployed equipment
Barter	A global insurance for ship and hull and deck equipment. No insurance for deployed equipment
Charter	A global insurance for ship and hull and deck equipment. No insurance for deployed equipment
Co-operation	A global insurance for ship and hull and deck equipment. No insurance for deployed equipment
Transporation insurance	Standard commercial insurance policy.
Technicians	
Number and type of technicians required to operate system in various scenarios	24 hour operations: minimum 5 technicians comprising: 4 Seismic Observers, 1 chief mechanic engineer, 3 mechanic engineers