



Multi System Sampling Island

Designed for continuous monitoring of all hydraulic and lubrication onboard systems

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

Designed for continuous monitoring of all hydraulic and lubrication onboard systems

Modern mobile equipment is very often a dedicated engineered construction including multiple systems for driving, steering, braking and working hydraulics.

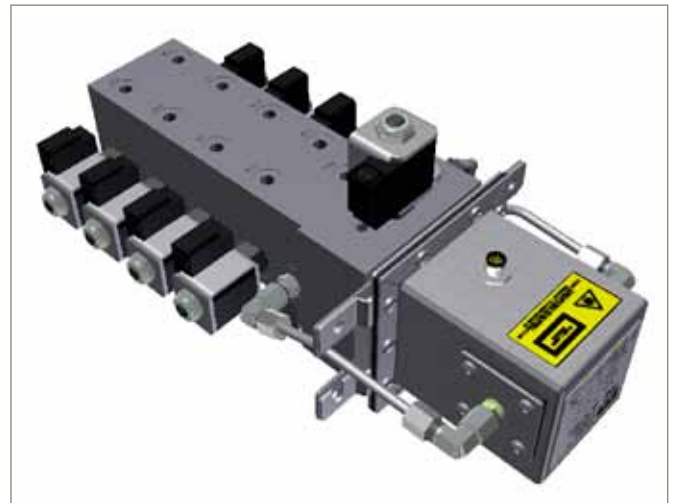
The more stringent demands related to the up-time and productivity of mobile equipment results into growing interest for system condition monitoring solutions.

With contamination still accountable for over 80% of the failure of hydraulic and lubrication systems, Parker's new innovative approach offers a lower cost solution for the efficient monitoring of multiple hydraulic and lubrication systems.

Parker's Multi System Sampling Island includes a set of sensors and particle counter complete with a manifold incorporating solenoid valves, optional controller and integrated flow control valve to sample oil from different systems. System after system, the cleanliness level, wear debris, moisture level and fluid condition / aging can be measured. Real time Alarms can be raised and information can be transmitted to machine operators, fleet owners, OEM service organization or the OEM itself.

This approach contributes to reduce unexpected down time of mobile equipment and supports the introduction of predictable maintenance.

The Multi System Sampling Island is a tailored system solution available on request.



Specifications

System pressure: 350 bar (higher pressures up to 420 bar in combination with pressure reducers)

Number of systems for direct sampling by the MSSI: up to 8

Flow rate: 60-100 ml/min, automatically controlled by flow control valve

Viscosity range: standard range from 5 – 320 cSt

Flushing time of hoses: programmable

Measurement period: 5 to 180 seconds

Reporting interval: 0 – 3600 seconds via RS232 / CAN J1939 type communication

Analogue output: 4-20mA, 0-5Vdc, 0-3Vdc (Configuration to be discussed)

Principle of operation: Laser diode optical detection of actual particulates

International codes: ISO 7-22, NAS 0 -12

Fluid operating temperature: +5°C to +80°C

Environmental operating temperature: -30°C to +60°C

Moisture sensor calibration: +/- 5% RH (over compensated temperature range of +10°C to +80°C)

Operating humidity: 5% RH to 100% RH

Certification: CE, IP69K

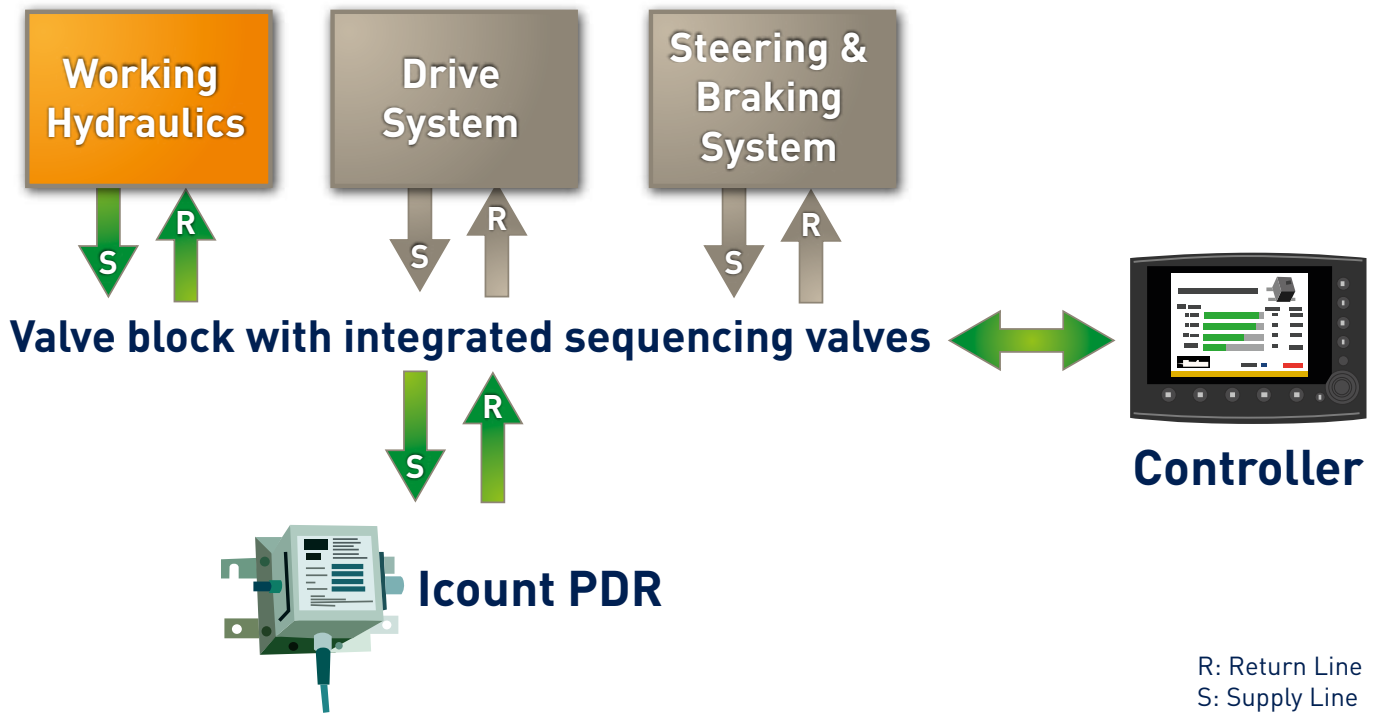
Fluid condition sensor data: on request

Fluid viscosity sensor data: on request

Metal wear debris sensor data: on request

Customized output of consolidated output signals: on request

Measure the condition of system after system continuously



Principle of operation

Oil is retrieved from the Working Hydraulics System

- Measurement of the oil condition after flushing the hoses.
- Data is stored in in-built data logger
- Pre-set alarms are an integral feature
- Oil is returned to the system

Controller activates the valves in the manifold block

Oil is now retrieved from the next circuit: Drive System

- Measurement of the oil condition after flushing the hoses
- Data is stored in in-built data logger
- Pre-set alarms are an integral feature
- Oil is returned to the system

Controller activates the valves in the manifold block
After measuring the oil of the steering & braking system the cycle is repeating with validating the condition of the working Hydraulics system.

Parker IQAN controller

Provides direct information of important system parameters like oil cleanliness level.



Parker Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai

Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt

Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt

Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku

Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles

Tel: +32 (0)67 280 900
parker.belgium@parker.com

BY – Belarus, Minsk

Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy

Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany

Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst

Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup

Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid

Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa

Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve

Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens

Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budapest

Tel: +36 1 220 4155
parker.hungary@parker.com

IE – Ireland, Dublin

Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)

Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty

Tel: +7 7272 505 800
parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal

Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker

Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw

Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira

Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest

Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow

Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga

Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica

Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto

Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul

Tel: +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev

Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick

Tel: +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park

Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario

Tel: +1 905 693 3000

US – USA, Cleveland

Tel: +1 216 896 3000

Asia Pacific

AU – Australia, Castle Hill

Tel: +61 (0)2-9634 7777

CN – China, Shanghai

Tel: +86 21 2899 5000

HK – Hong Kong

Tel: +852 2428 8008

IN – India, Mumbai

Tel: +91 22 6513 7081-85

JP – Japan, Tokyo

Tel: +81 (0)3 6408 3901

KR – South Korea, Seoul

Tel: +82 2 559 0400

MY – Malaysia, Shah Alam

Tel: +60 3 7849 0800

NZ – New Zealand, Mt Wellington

Tel: +64 9 574 1744

SG – Singapore

Tel: +65 6887 6300

TH – Thailand, Bangkok

Tel: +662 186 7000-99

TW – Taiwan, Taipei

Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires

Tel: +54 3327 44 4129

BR – Brazil, Sao Jose dos Campos

Tel: +55 800 727 5374

CL – Chile, Santiago

Tel: +56 2 623 1216

MX – Mexico, Apodaca

Tel: +52 81 8156 6000

EMEA Product Information Centre

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

US Product Information Centre

Toll-free number: 1-800-27 27 5374

