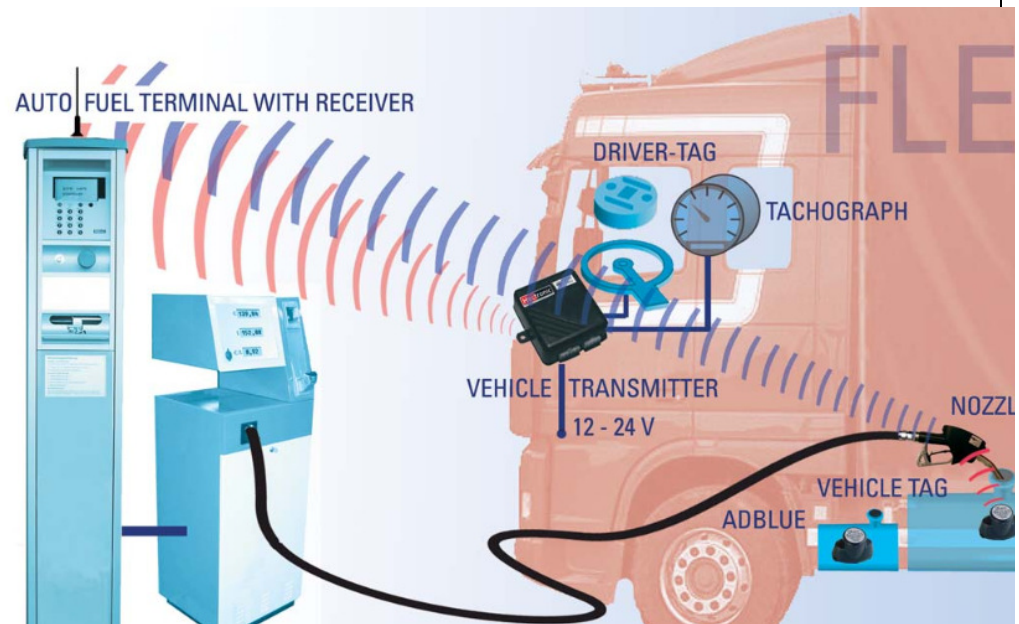


No.	Question	Answer
1	<p>Page 7: 5.6 Fifth wheel  ...by visual and buzzer signals.  When the king pin is properly locked a light will show up. In addition you want a buzzer alarm.  Please explain how long the alarm should beep, 2 sec, 5 sec etc.</p>	<p>Description of monitoring of opening /closing of kingpin lock  There are possible four combination of opening /closing the fifth wheel:</p> <ol style="list-style-type: none"> <li>a. There is no kingpin in the slot and the interlock is open. The LED light is OFF and the buzzer is silent, i.e. no information about it on the dashboard</li> <li>b. There is no kingpin in the slot and the interlock is CLOSED. The RED LED lamp is ON, buzzer is also ON until the change of status of kingpin and/or interlock</li> <li>c. The kingpin is located correctly in the slot and the interlock is open. The RED LED lamp is ON, buzzer is also ON until the change of status.</li> <li>d. The kingpin is located correctly in the slot and the interlock is CLOSED. The GREEN LED lamp is ON and the buzzer is OFF (silent).</li> </ol>
2	<p>Page 8: 5.10 Operator's cabin  - hydraulic drive of cabin lifting  Do you mean electrically tilting of the cabin instead of manual pumping by steelbar?</p>	<p>manually driven hydraulic lifting of the cabin</p>
3	<p>Page 10: 6.4.1 Switches  -ignition  -engine switch (Engine starter?)  In our opinion you do need a key for the ignition. Then you can have a button for the engine start.  Please explain if this is what you want. However, in order to understand this request, please explain the idea behind it.</p>	<p>We require key driven ignition switch.</p>
4	<p>Page 11: 7 Data Recording and Reporting  Please provide more technical details how this should work resp. what kind of equipment should be installed.</p>	<p>Sending data with IMV number, current working hours and distance (millage) in kilometres, when tractor is refuelled, to the "PETROPOINT FLEET+" delivered by HECTRONIC and installed on existing fuel station.  The vehicle must be equipped with individual Vehicle Tag (token) and Vehicle transmitter to transfer the amount of traveled kilometers and Hectronic MTH.</p>



Picture of the system overview\*)

**Vehicle tag\*)**

Cable-free passive transponder for installation on the vehicle tank inlet in conjunction with the PetroPoint nozzle unit (ATEX approval).

Vehicle tag

**Vehicle transmitter metal housing\*)**

433MHz 12 / 24V - PetroPoint vehicle transmitter for the transfer of vehicle identification, driver identification, nozzle identification and kilometer reading.

Transmission frequency 433 MHz

Range approx. 20 m

Operating voltage 9-16V DC or

18-32V DC

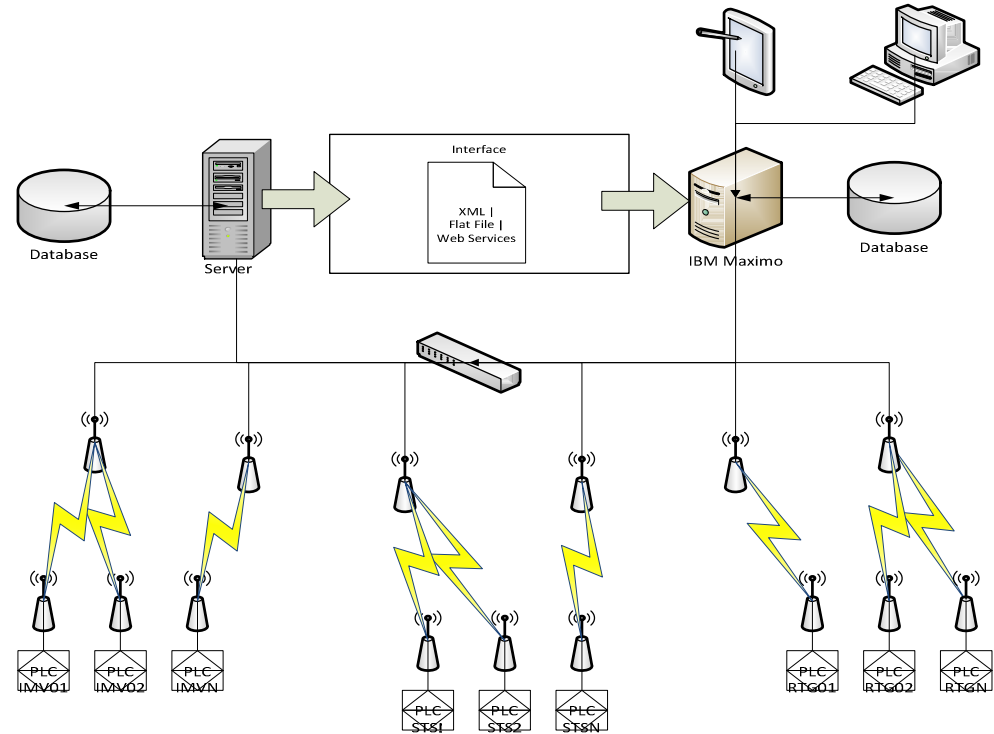
Power consumption max. 200 mA during

transmission  
Temperature range -25°C to +70°C  
Operating hours integrated

\*)Source: 'Petropoint. The Analyst.' by HECTRONIC; D-79848 Bonndorf

5 Page 16: A. Recording and Reporting (RR) Unit  
This is a very comprehensive request which actually needs to be discussed.  
Please let us know if you have such a system already installed on your Terminal. If yes, please send us more detailed information.  
Such systems have to be adapted not only for the different vehicles but also with the control center.

We do not have such a system at the terminal but the system should work as described below.  
EAM system will be fed with data gathered from PLC's of equipment. Preferably the interface would base on web services, but any type of flat file or XML document as much universal as possible is also acceptable.  
Apart from feeding IBM Maximo, the Maintenance system there must be a possibility of live view of the equipment status.



		<p>The RR UNIT should be installed on each tractor. It shall measure, read current GPS position every second or few seconds (adjustable by terminal engineers) and all critical data from tractor PLC. RR sends all other required data with frequency of few seconds or few hours (fluently adjustable by the user) and each time after new alarm was recorded, via Wi-Fi 802.11 b/g/n info to the DCT computer registered data base in readable form (CSV, XML or imprint in data base) what will be further transmitted to Engineering Asset Management and Maintenance System. The RR should be double direction unit and also an engineer seating in front of the computer e.g. located in the workshop offices must be able to cancel alarms remotely and activate or deactivate some readings as well adjust frequency of data sending.</p> <p>Preferably the wifi 802.11 b/g/n network would be the medium of connecting the equipment to “control center”. All other connections can be copper/fiber Ethernet. The existing network is based on Cisco equipment.</p> <p>Data registered and send by the RR, as a minimum:</p> <ul style="list-style-type: none"> <li>Current GPS position</li> <li>Current working hours (current value which is displayed also on the dashboard)</li> <li>Current distance -kilometers (current value which is displayed on the dashboard)</li> </ul> <p>All alarms from engine, transmission like low oil pressure or low level in the engine and in the transmission, low fuel level in the tank or other alarms from equipment fixed on the tractor and able to issue such information with its digital code and description.</p>																
6	<table border="1"> <tr> <th data-bbox="280 1098 548 1193"><b>DCT Requirement</b></th> <th data-bbox="548 1098 779 1193"><b>Question – possibilities</b></th> <th data-bbox="779 1098 1048 1193"><b>Acceptation – Yes/NO</b></th> <th data-bbox="1048 1098 1182 1193"><b>Yes/NO</b></th> <th data-bbox="1182 1098 1668 1193"><b>Turning radius (maximum):</b></th> <th data-bbox="1668 1098 2063 1193"><b>8m</b></th> </tr> <tr> <td data-bbox="280 1193 548 1374">Turning radius: maximum 10m</td> <td data-bbox="548 1193 779 1374">1 option - Turning circle 13.5 meter per 3300mm 2 option - 13.0</td> <td data-bbox="779 1193 1048 1374"></td> <td data-bbox="1048 1193 1182 1374"></td> <td data-bbox="1182 1193 1668 1374"> <ul style="list-style-type: none"> <li>• <b>5th wheel capacity:</b></li> <li>• <b>5th wheel height from the ground level:</b></li> </ul>           +/-10mm         </td> <td data-bbox="1668 1193 2063 1374">           minimum 35 Ton            1200mm with tolerance         </td> </tr> </table>	<b>DCT Requirement</b>	<b>Question – possibilities</b>	<b>Acceptation – Yes/NO</b>	<b>Yes/NO</b>	<b>Turning radius (maximum):</b>	<b>8m</b>	Turning radius: maximum 10m	1 option - Turning circle 13.5 meter per 3300mm 2 option - 13.0			<ul style="list-style-type: none"> <li>• <b>5th wheel capacity:</b></li> <li>• <b>5th wheel height from the ground level:</b></li> </ul> +/-10mm	minimum 35 Ton 1200mm with tolerance					
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			meter per 3100mm			
		5th wheel capacity : minimum 35 Ton	34 ton			
		Lowest 5th wheel height from the ground level: 929 mm	1145mm @ 34 + 36 Tons			
7		The axle must be able to withstand the maximum load of the fifth wheel at 30 km/h of no less than 35 tons.	Rear axle load 38Tons at 20 km/h			The axle must be able to withstand the maximum load of the fifth wheel at 20 km/h of no less than 32 tons.
8		The steering wheel must have a knob and be adjustable in both in / out and up / down direction.	height/length adjustable steering column is not available			This is an option now.
9		There must be two separate covers for the seat and seatback as well as headrest.	One form seat cover. The seats are already upholstered by the seat manufacturer		Yes, must	be two separate covers for the seat and seatback as well as headrest.
		turn indicators must automatically switch OFF during rotation of the steering wheel in	automatically turn off lights indicator is not possible since there is not automatic centre			We don't require it anymore.

	the opposite direction	position of steering wheel as in road cars.			
	door security lock opened with ignition key, described further	Cabin door is opened with a secondary key. Not with the ignition key.		We confirm it.	
10	LED turn indicators, rear lights, internal light, external warning beacon. Can be classic ?		Must be LED		
11	The tractor should be equipped with diagnostic tools	software required for all diagnostic work can be done by the user itself.		We don't understand the question	
12	4.0 Does the inclination of 15% occur on the terminal? For these kind or inclinations we recommend 4x4 drive for better traction.		We don't need 4x4 drive.		
13	5.10 Does the indicator light for signaling the fastening of the 2 point seat belt needs to be installed inside the cabin or outside?		Outside, on the roof of the cabin only.		
14	5.10 Please specify what IT equipment will needs to be installed and what power supply they need.		There will be installed a mobile computer – Honeywell Thor VM1 – on a standard RAM mounting (part number VM1008BRKTKIT). It needs 12V 12A DC.		
15	5.10 There is room for a communication radio underneath the cabin roof. Does this comply?		It's ok. There should be a power supply of 12V 10A DC available in that place.		

16	5.10 In the cabin roof there are mounting holes present for the installation of speakers. (close to the comm radio slot)	Yes – we accept.
17	5.10 The requested flat steel shelve 20x10. Where will this be used for?	It will be used for installing the mobile computer mentioned above. It should be close to the driver's dashboard, as high as the steering wheel.
18	6.1 Please specify "ignition key fully compatible with Type 014603" we will provide their own standard ignition keys.	014603 was firstly delivered to DCT and is widely used : <a href="http://www.kramp.com/shop-nl/en/59062/530681/82837/ignition+key">http://www.kramp.com/shop-nl/en/59062/530681/82837/ignition+key</a>
19	7.0 Please provide information on the Hectronic system	Look at answer to point No.4
20	11.0 What is the total amount of mechanics and drivers that will need training	Must be 5 courses with 15-20 in each course
21	II.00 Mentioned parts in this Spare Parts List must be inside offer ? Alternatively we can make you a recommended spare parts list for the complete fleet of 33 units.	List of spare parts is included in the specifications and can not be changed.
22	<b>Options for IMV – please for Your decision</b> Foldable co driver seat Actia Fleet	we don't understand your question
23	5.10 Operator's cabin Request: Turn indicators must automatically switch OFF during	We don't require it anymore.

	<p>rotation of the steering wheel in the opposite direction</p> <p>Answer: Unfortunately this is from a technical point of view not possible.</p> <p>Reason: As we are using an orbitrol for steering it is technically not possible to fulfil this point. When using an orbitrol you can keep on steering in both directions without going on block. So there is no possibility to set a “stopper” in order for the indicator to switch back automatically as we have not setting point.</p>	
24	<p>8 Diagnostic Tools</p> <p>Request: The software allows to: Calibration</p> <p>Answer: Calibration of the engine can only be done by the engine manufacturer.</p>	We require only possibility of typical maintenance calibration or adjustment.
25	<p>We found out that you request under the point Engine (Technical Specification Page 5) a power of 165-235 kW.</p> <p>Our latest engine with AdBlue according to exhaust emission TIER IV has a capacity of 160 kW. The requested torque can be achieved without problem.</p> <p>Please note that the modern engines nowadays have less power and less displacement but still reach the same or even higher torque values. In addition they also need less fuel.</p> <p>Therefore please change the specification as follows:</p> <p>Power at 2000-2400 rpm: 160 – 235 kW Displacement: 5,0 to 7,9 l</p>	<p>Please follow our specification.</p> <p>We do not accept your proposal</p>
26	<p>Referring to your updated Technical Specification please let us know the following:</p>	<p>“The vehicle must be equipped with individual Vehicle Tag (token) and Vehicle transmitter to transfer the amount of traveled kilometers and Hectronic MTH.” - quote from the specifications.</p>



	<p>7 Data Recording and Reporting</p> <p>The vehicle must be equipped with individual Vehicle Tag (token) and Vehicle transmitter to transfer the amount of traveled kilometers and Hectronic MTH.</p> <p>Please let us know if</p> <ul style="list-style-type: none"> <li>-the Vehicle Tag (token) and Vehicle transmitter will be provided and installed by DCT at site</li> <li>or</li> <li>-if we need to deliver and install it with the vehicle, i. e. it is part of the vehicle delivery?</li> </ul>	<p>The supplier must mount / equip the vehicle with Vehicle Tag (token) and Vehicle transmitter during production at the factory and provide a vehicle equipped with described elements.</p>
27	<p>4. General requirements:</p> <p>Lowest 5th wheel height from the ground level: 929 mm</p> <p><b>5<sup>th</sup> wheel height 929 mm is lower than tires. Is it possible to change lowest height from ground level to 1125 mm otherwise trailer will hit the tires every time when trailer is connected?</b></p>	<p>Please follow our specification</p> <p>5th wheel height from the ground level: 1200mm with tolerance +/-10mm.</p> <p>Chapter 4 on page 5.</p>
28	<p>Engine: Power at 2000 – 2400 rpm: 165 – 235 kW</p> <p><b>New Stage 4 engines have less power and displacement than earlier engines but still have same and enough torque to handle loads. Could you change engine specification to Power at 2000 – 2400 rpm: 160 – 235 kW and Displacement 5.0 – 7.9 litres?</b></p>	<p>Please follow our specification.</p> <p>We do not accept your proposal</p>
29	<p>5.10. Operators cab</p> <p>Electrically heated rear window.</p> <p><b>We have sliding rear door and one smaller rear window where it is not technically reasonable to make electrically heated window, it is not available.</b></p>	<p>Please follow our specification</p> <p>Electrically heated rear window required</p>
30	<p>Cabin door fixed on hinges.</p>	<p>Yes – we accept this solution</p>

	Side door is fixed with hinges. Additional rear door is sliding door. Could we have it sliding?	
31	7. Data recording and Reporting Is HECTRONIC system installed to machines, part of the delivery scope?	Yes, the Hectronic system is the scope of delivery, to be installed on the tractors.
32	10. Technical Documentation  Workshop manual Assembly drawings and main components drawings are not available. Maintenance manual is including preventive maintenance schedule and instructions for that. Is it ok?	Documentation required by us: - Assembly drawings, - Main components drawings. Our documentation required in the specification discharged in Chapter 10 on page 15.