

EnOcean PTM210

Self-Powered Push Button Transmitter Module

Using energy harvesting which is in fact like a small dynamo, the PTM210 is more expensive than modules using battery, so what are its advantages ?

The PTM210 is a push button transmitter module from EnOcean, it enables the implementation of wireless remote controls without batteries. It is already widely used for consumer applications such as the control of LED lighting systems.

Power is provided by the EnOcean ECO200 energy converter, a built-in electro-dynamic power generator. Converting kinetic energy into electrical energy, it works in the same way as a small dynamo, drawing out and delivering this power to a wireless module.

With an equivalent transmission range than systems using batteries (300m without obstacle, 30m indoors), the EnOcean switch announces a possibility of about 100,000 actuations representing a lifetime of 40 years for 7 daily uses. Thus it saves replacing the lithium battery every 3 years on average for systems with battery, a savings of around 13 batteries.

The reverse costing report by System Plus Consulting provides a full teardown of the PTM210/PTM215 wireless modules and of the energy converter, with an estimation of their manufacturing cost.

REVERSE COSTING ANALYSIS

REPORT BY 

EnOcean PTM210

71 pages

April 2014

Pdf file

Xls file

PRICE :

Full report: EUR 1,990

COMPLETE TEARDOWN WITH:

- Detailed Photos
- Manufacturing Process Flow
- Manufacturing Cost Analysis
- Selling Price Estimation

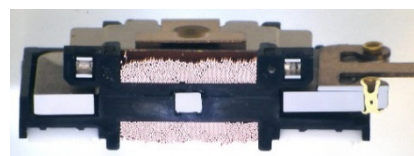
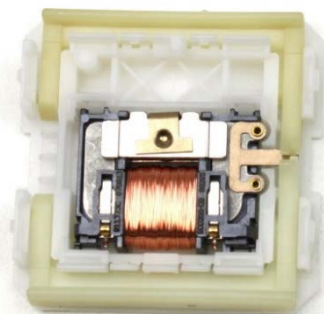
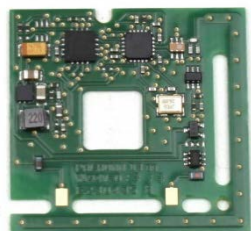


TABLE OF CONTENTS

Overview/Introduction , EnOcean Company Profile

Physical Analysis

- Global External View
- External Views & Dimensions
- Disassembly of the Module
- Disassembly of the ECO200
- Cross-Section of the ECO200
- Identification of the Materials of the ECO200
- Electronic Board
 - ✓ Main Board – Top Side – Global View
 - ✓ Main Board – Top Side – High Definition Photo
 - ✓ Main Board – Top Side – Components Markings
 - ✓ Main Board – Top Side – Components Identification
 - ✓ Main Board – Bottom Side – Global View
- Comparison between PTM210 and PTM215

Cost Analysis

- Accessing the BOM
- Estimation of the cost of the PCB
- BOM Cost - Electronic Board
- BOM Cost - ECO200
- Estimation of the cost of the Housing Parts
- BOM Cost - Housing
- Material Cost Breakdown
- Accessing the Added Value (AV) cost
- Electronic Board Manufacturing Flow
- Details of the Electronic Board AV Cost
- Details of the ECO200 AV Cost
- Details of the Housing AV Cost
- Added Value Cost Breakdown
- Manufacturing Cost Breakdown

Estimated Price Analysis

- Estimation of the Selling Price - EMS
- Estimation of the Selling Price - EnOcean

Distributed by



Performed by



ORDER FORM

Please process my order for "EnOcean PTM210 push button transmitter module" Reverse Costing

Ref.: SP14170

Full Reverse Costing report:

EUR 1,990*

*For price in dollars please use the day's exchange rate

*All reports are delivered electronically in pdf format

*For French customer, add 20 % for VAT

SHIP TO

Name (Mr/Ms/Dr/Pr):

Job Title:

Company:

Address:

City: State:

Postcode/Zip:

Country*:

*VAT ID Number for EU members:

Tel:

Email:

Date:

Signature :

PAYMENT

DELIVERY on receipt of payment:

By credit card:



Number: |_|_|_|_|_| |_|_|_|_|_| |_|_|_|_|_| |_|_|_|_|_|

Expiration date: |_|_| / |_|_| Card Verification Value: |_|_|_|_|

By bank transfer:

HSBC – CAE- Le Terminal -2 rue du Charron- 44800 St Herblain France
BIC code : CCFRFRPP

In EUR

Bank code : 30056 - Branch code : 00955 - Account : 09550003234
IBAN : FR76 3005 6009 5509 5500 0323 439

In USD

Bank code : 30056 - Branch code : 00955 - Account : 09550003247
IBAN : FR76 3005 6009 5509 5500 0324 797

Return order by:

FAX: +33 (0)253 55 10 59

MAIL: SYSTEM PLUS CONSULTING
21 rue La Nouë Bras de Fer
44200 Nantes – France

Contact:

sales@systemplus.fr, Tel: +33 (0)240 18 09 16

Our prices are subject to change.

Please check our new releases and price changes on www.systemplus.fr

The present document is valid 6 months after its publishing date: March 06th, 2014.

BILLING CONTACT

Name:

Email:

Phone:

ABOUT SYSTEM PLUS CONSULTING

System Plus Consulting specializes in the **cost analysis** of electronics, from **semiconductor devices** to **electronic systems**, and has developed a complete range of services and costing tools to provide **in-depth production cost studies** and to estimate the **objective selling price** of a product.

COSTING SERVICES

- ✓ **On demand Reverse Costing studies** are performed on ICs, ASICs, MEMs, Power Devices, ECUs, electronic boards and full electronic systems.
- ✓ **The catalog of available reports** includes cost analyzes on MEMS, LEDs, Modules and Electronic systems.

All these analyses are performed using in-house developed, proprietary costing tools and their technological databases.

COSTING TOOLS

« Purchaser » tools

- ✓ IC Price+ to estimate the cost of any integrated circuit
- ✓ Power Price+ for any power component or module
- ✓ SYS.Cost
- ✓ PCB Price+ for printed circuit boards
- for electronic boards and systems

Cost Simulation Tools, process flow based

- ✓ MEMS CoSim+
- ✓ LED CoSim+
- ✓ TSV CoSim+ (thru silicon vias)
- ✓ Power CoSim+
- ✓ Sapphire CoSim+

Other costing models can be developed according to customer specifications

Distributed by



Performed by



TERMS AND CONDITIONS OF SALES

1. INTRODUCTION

The present terms and conditions apply to the offers, sales and deliveries of services managed by System Plus Consulting except in the case of a particular written agreement.

Buyer must note that placing an order means an agreement without any restriction with these terms and conditions.

2. PRICES

Prices of the purchased services are those which are in force on the date the order is placed. Prices are in Euros and worked out without taxes. Consequently, the taxes and possible added costs agreed when the order is placed will be charged on these initial prices.

System Plus Consulting may change its prices whenever the company thinks it necessary. However, the company commits itself in invoicing at the prices in force on the date the order is placed.

3. REBATES and DISCOUNTS

The quoted prices already include the rebates and discounts that System Plus Consulting could have granted according to the number of orders placed by the Buyer, or other specific conditions. No discount is granted in case of early payment.

4. TERMS OF PAYMENT

System Plus Consulting delivered services are to be paid within 30 days end of month by bank transfer except in the case of a particular written agreement.

If the payment does not reach System Plus Consulting on the deadline, the Buyer has to pay System Plus Consulting a penalty for late payment the amount of which is three times the legal interest rate. The legal interest rate is the current one on the delivery date. This penalty is worked out on the unpaid invoice amount, starting from the invoice deadline. This penalty is sent without previous notice.

When payment terms are over 30 days end of month, the Buyer has to pay a deposit which amount is 10% of the total invoice amount when placing his order.

5. OWNERSHIP

System Plus Consulting remains sole owner of the delivered services until total payment of the invoice.

6. DELIVERIES

The delivery schedule on the purchase order is given for information only and cannot be strictly guaranteed. Consequently any reasonable delay in the delivery of services will not allow the buyer to claim for damages or to cancel the order.

7. ENTRUSTED GOODS SHIPMENT

The transport costs and risks are fully born by the Buyer. Should the customer wish to ensure the goods against lost or damage on the base of their real value, he must imperatively point it out to System Plus Consulting when the shipment takes place. Without any specific requirement, insurance terms for the return of goods will be the carrier current ones (reimbursement based on good weight instead of the real value).

8. FORCE MAJEURE

System Plus Consulting responsibility will not be involved in non execution or late delivery of one of its duties described in the current terms and conditions if these are the result of a force majeure case. Therefore, the force majeure includes all external event unpredictable and irresistible as defined by the article 1148 of the French Code Civil?

9. CONFIDENTIALITY

As a rule, all information handed by customers to system Plus Consulting are considered as strictly confidential.

A non-disclosure agreement can be signed on demand.

10. RESPONSABILITY LIMITATION

The Buyer is responsible for the use and interpretations he makes of the reports delivered by System Plus Consulting. Consequently, System Plus Consulting responsibility can in no case be called into question for any direct or indirect damage, financial or otherwise, that may result from the use of the results of our analysis or results obtained using one of our costing tools.

11. APPLICABLE LAW

Any dispute that may arise about the interpretation or execution of the current terms and conditions shall be resolved applying the French law.

If the dispute cannot be settled out-of-court, the competent Court will be the Tribunal de Commerce de Nantes.