# Modern Industrial Weighing Terminal series PUE HY

RADWAG company presents a modern industrial terminal series PUE HY. The terminal is enclosed in a stainless steel housing ensuring high IP rating. The PUE HY series joins the main features of PUE 7 indicator, like ease in operation, with the highlights of industrial indicators series H. In addition, the improved ergonomics of the terminal, makes it even more user friendly, although it is designed to operate in hard industrial conditions.



The basic assumption while designing the new terminal series PUE HY was creation of a device which is equally intuitive as PUE 7 series and meets the requirements of an industrial terminal. The main feature of an industrial terminal is stainless steel housing providing high leaktightness. Simultaneously, the technical opportunities of the new terminal were extended if compared to PUE 7 model. The PUE HY terminal, through operation of a large number of IN/OUT and modern software is successfully implemented in load cell based scales and instruments for dosing/filling, formula making, counting and labeling systems functioning in industrial conditions. It is also widely applicable in weighing systems cooperating with automatics.

### **General description**

The **PUE HY** terminal is designed in stainless steel housing with IP 66/67, which ensures its correct operation in hard industrial conditions (humidity and dustiness), enables easy terminal's washing and provides resistance to externally applied chemical disinfection and cleaning agents. The terminal features a 5,7" TFT colour display with touch panel, membrane QWERTY keyboard and separate numeric and function keys. The terminal can cooperate with maximally 4 weighing platforms, barcode scanners, printers and label printers, transponder card scanners, and PC peripherals (mouse, keyboard, USB flash data storage device – through an USB adapter).



Fig.1 – back panel of PUE HY terminal

All slots and sockets are placed on the back panel of terminal's housing, and they meet the requirements of terminal's leaktightness. Similarly to other industrial indicators offered by RADWAG, the PUE HY series gives the opportunity of versatile mounting, provided by universal mounting holder.

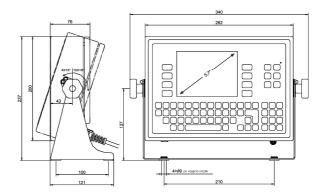


Fig.2 - PUE HY dimensions

As standard, the **PUE HY** terminal can cooperate with a single weighing platform.

#### Software of RADWAG's terminal

RADWAG company supplies the terminal with weighing software. Depending on application, the **PUE HY** can be uploaded with one of below listed software versions:

- standard (modes: labeling, counting pieces, percent setup)
- PGC in single stand version and PGC NET
- Industrial formula making mode with functionality of dosing mode.

#### Standard terminal's software version

The standard software of **PUE HY** enables executing basic weighing functions with standard measuring units: [g], [kg], [N], [ct], [lb], [oz]. The functionality of **PUE HY** standard operation mode provides:

- Tarring in all measuring range,
- Manual tare inscribing,
- Function of a control scale (+/- control of weighing result),
- · Weighing on minus,
- Weighing result averaging with application of digital filter,
- Weighing loads with switched off "autozero" function,
- Access to databases of: operators, assortments, weighing records, contractors, packages, warehouses and labels,
- Cooperation with: label and receipt printers, barcode scanners, proximity card scanner,
- Summing of measurement results,
- Labeling,
- Counting pieces.

## Software for single stand Prepackaged Goods Control and PGC NET

The single stand PGC and PGC-NET software enables terminal's utilization for designing control scales control operating in control systems of prepackaged goods.

Such scales (scale model HTY) feature implemented module for executing prepackaged goods control, which is supported by database listing the goods, operators, accomplished product controls and average tares. A control process that is initiated from scale level is completed automatically on check of pre-defined quantity of packages (samples). The quantity of packages is determined by scale software and it depends on batch quantity of a good.

Scales series HTY if connected with computer software PGC NET create a multi-position system (network of scales). Each scale is an independent weighing standing and information on

control procedure is regularly sent to computer program. Computer program enables data collecting from each connected scale in real time. System enables control start from the level of scale or from the level of computer program.

#### Formula making and industrial dosing

The novelty in industrial terminals is the modern approach to formula making and industrial dosing processes. Executing these processes requires terminal operation in Formulas mode.

The Formulas software enables:

- Creating formulas directly from PUE HY terminal;
- Preparing dosing processes directly in the terminal;
- Configuring cooperation of formula making process with executive devices of the automatics:
- Manual and automatic dosing and formula making process;
- Executing of dosing and formula making processes simultaneously on multiple weighing platforms (up to 4 weighing platforms plugged to a single PUE HY terminal).



Fig.3 – Formulas on terminal series PUE HY

The Formulas software fully employs the technical features offered by the new terminal for cooperation with external automatics devices (controlling dosing valves). The additional highlight of the PUE HY is the possibility of introducing relations between ingredients dosed on different weighing platforms.

Similarly to other modes, the Formulas mode gives access to files on: products, contractors, operators, weighing records, packages, warehouses and labels.

Additionally, for the purpose of formulas mode, there are two more databases accessible: formulas and reports from formula making processes.



Fig.4 - Database of PUE HY terminal

The menu "Formulas" enables creating new formulas with application of records present in menu "Products". It is also possible to preview or edit already created formulas. The menu "Formula reports" is dedicated to collecting formula making results on a specific terminal.

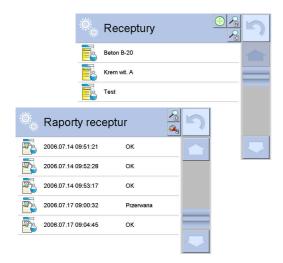


Fig.5 - Formula records

#### Software components for PUE HY

Each terminal features are freeware supporting software designing by the customers or external companies. The freeware comprises, among others: DLL (Dynamic-Link Library) library dedicated for Windows environment. It stores implementations of functions related to operation of the internal weighing module. The functions can be recalled in software designed by external software designers. Such configuration enables creating applications without being familiar to scale construction nor to communication protocol. The applications can be utilized in software

designed in different environments dedicated to Windows platform, e.g. VB, C++, C#, ".NET".

Correct cooperation and creation of software for **PUE HY** terminal requires programming environment Visual Studio 2005 or newer in Professional or higher, delivered by Microsoft. On installation of the software environment, it is possible to design new software for terminal series PUE HY. Utilization of the RADWAG library requires application of software designing platform ".**NET Compact Framework 2.0**".

#### Peripherals and external devices



Apart from standard interfaces, the PUE HY offers extension of the interfaces / modules by: voltage output 0-10V, power loop 0-20mA or 4-20mA, extension module for inputs/outputs, additional weighing platform module, module for Profibus DP.

#### Selected technical data

Housing	Stainless steel
IP rating	IP 66/67
Display	TFT 5,7" with touch panel
Keyboard	Membrane QWERTY
Number of verification	6000
intervals	
Processor	ARM 200MHz
RAM	64 MB
Data memory	FLASH 1 GB
Industrial interfaces	Profibus DP, RS485, RS232

A detailed technical specification is available on the website:

### http://radwag.com/english/9 pue hy.htm

Company "RADWAG Wagi Elektroniczne" provides full support in configuring industrial weighing systems. The company, with its worldwide sales and service network, is close to the customer which facilitates communication and collaboration to adapt the systems to the specific requirements of the customer, and provides fast and professional warranty and post-warranty service.



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