

1746-WS

HI 1746-WS Weigh Scale Module

Hardy 1746-WS is a self-contained weigh-scale I/O module that plugs into an Allen-Bradley SLC 500 chassis. It converts load-cell signals for gross, net and rate-of-change weighing and exchanges values through scanned I/O and M-file data.

BRAND	HARDY	ORIGIN	USA
MODEL	1746-WS	HS CODE	8537101190
FAMILY	Allen-Bradley SLC 500 Weighing System	SHIP FROM	Xiamen, Fujian, China

MANUFACTURER SOURCE RECORD

HI 1746-WS Weigh Scale Module Operation and Installation Manual
Hardy Process Solutions document 0596-0234-01 Rev. J, Series C

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Product Overview

SYSTEM FUNCTION

Hardy 1746-WS is a self-contained weigh-scale I/O module that plugs into an Allen-Bradley SLC 500 chassis. It converts load-cell signals for gross, net and rate-of-change weighing and exchanges values through scanned I/O and M-file data.

FUNCTION 1

20-bit conversion with 980,000 display counts

FUNCTION 2

WAVERSAVER filtering for mechanical-vibration rejection

FUNCTION 3

C2 electronic calibration plus test-weight and soft calibration

FUNCTION 4

Direct SLC scanned-I/O and M-file data exchange

TECHNICAL NOTE

Install 1746-WS in a documented SLC 5/02, 5/03, 5/04 or 5/05 system and record the load-cell wiring, calibration method, WAVERSAVER setting and M-file mapping. Complete zero, span and live-load verification before enabling scale-dependent logic.

Technical Data and Acceptance

PARAMETER	VERIFIED VALUE
Module type	SLC 500 weigh-scale I/O module
A/D conversion	20 bit
Display counts	980,000
Scanned I/O	32 words
M-file data	128 words
WAVERSAVER	0.25 Hz and above; five selectable steps
Weighing modes	Gross, Net and Rate-of-Change
Calibration	C2, test-weight and soft/manual methods
Control outputs	Two TTL outputs for relay control
Weight	1.1 lb / 0.5 kg

ENGINEERING BOUNDARY

Install 1746-WS in a documented SLC 5/02, 5/03, 5/04 or 5/05 system and record the load-cell wiring, calibration method, WAVERSAVER setting and M-file mapping. Complete zero, span and live-load verification before enabling scale-dependent logic.

Acceptance Path

1 IDENTITY

1746-WS hardware series and SLC slot are recorded.

2 SIGNAL CHAIN

Load cells, junction box, shield and module wiring are verified.

3 CALIBRATION

Zero and span pass with the approved calibration method.

4 FUNCTIONAL PROOF

Gross, net, rate and PLC control behavior are accepted.

Applications and Engineering FAQ

APPLICATION	ENGINEERING CONTEXT
Hopper and vessel weighing	Converts load-cell signals for batch, inventory and material-handling control.
SLC 500 batching systems	Supplies gross or net weight to PLC logic through the documented data map.
Rate-of-change monitoring	Calculates weight change for controlled filling, discharge or material-flow observation.
Vibration-affected scales	Uses WAVERSAVER filtering to reduce the influence of plant mechanical vibration.

Model-Specific FAQ — Part 1

QUESTION	ANSWER
Which SLC processors support Hardy 1746-WS?	The manual documents operation in SLC 5/02, 5/03, 5/04 and 5/05 systems subject to the required data-file handling.
What converter resolution does Hardy 1746-WS use?	The module uses a 20-bit analog-to-digital converter and provides 980,000 display counts.
How much scanned I/O is used by Hardy 1746-WS?	The module uses 32 words of scanned I/O and also provides 128 words through M files.
What weighing modes are available in Hardy 1746-WS?	The documented modes are Gross, Net and Rate-of-Change.

FAQ, Related Products and Source

Related Products on Apter Power

QUESTION	ANSWER	MODEL	APTER POWER PAGE
What calibration methods are supported by Hardy 1746-WS?	It supports C2 electronic calibration, hard or test-weight calibration and soft or manual load-cell calibration.	1746-itv16	View 1746-itv16
What does WAVERSAVER do in Hardy 1746-WS?	WAVERSAVER filters mechanical vibration from the weight signal with selectable response settings from 0.25 Hz and above.	1746-iv32	View 1746-iv32
Is WS100 software required for Hardy 1746-WS operation?	No. Hardy identifies WS100 as an optional configuration and troubleshooting tool rather than an operating requirement.	1746-ni16i	View 1746-ni16i
What must be tested after replacing Hardy 1746-WS?	Verify load-cell wiring, calibration, zero, span, gross/net/rate values, setpoints, M-file mapping and PLC interlocks.	1746-ni8	View 1746-ni8
		1746-nio4v	View 1746-nio4v
		1746-no4i	View 1746-no4i
		1746-nr4	View 1746-nr4
		1746-oap12	View 1746-oap12

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