

- Over 32,000 (April 2015) devices supported with new devices added monthly
- Intelligent pin drivers operate down to 1.8V so you'll be ready to program the full range of tomorrow's advanced low-voltage devices
- Hi-speed USB 2.0 connectivity
- Easy to use software with automatic file format detection and conversion
- Comprehensive 3 years parts and labour warranty
- 2 years free software updates

The Dataman 48UXP is a universal device programmer which works through the USB or parallel port of your PC. It features a 48-pin universal pin driver and an expandable TTL pin driver system. Intelligent hardware, including microprocessor and FPGA allow it to program devices you use today and the devices of tomorrow. Designed for both laboratory and production environments, the Dataman 48UXP is intelligent, fast and easy to use.

## Technological Innovation and Performance Leadership

### Universal Pin Driver – No Adapter Required for DIL Devices

The Dataman 48UXP features a universal pin driver, each pin capable of supplying four different voltages or ground. It can also be configured for TTL high/low levels with pull-high/pull-low, high-speed clock and high impedance. This advanced pin design lets you program any DIL device of up to 48 pins without needing an adapter.

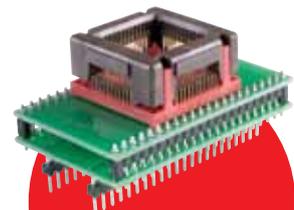
### Unbeatable Programming Speed

The Dataman 48UXP's on-board intelligence reduces system overhead to a minimum giving a 100% performance increase over its predecessor when programming high density flash devices. It can program an Intel 32 Mbit flash chip in less than 60 seconds.

### Programming Speed Test Report

	Intel 28F320C3B	Spansion S29GL032ATFR
Blank check	18.6 sec	18.1 sec
Program	57.5 sec	54.4 sec
Verify	32.5 sec	35.0 sec
Total	108.6 sec	107.5 sec

The Dataman 48UXP is much faster than its competitors, making it much more productive with today's high density, multi-megabit memory devices.



FREE adapter included

### Device Insertion and Contact Checks

The Dataman 48UXP performs device insertion and contact checks before it programs each device. It can detect poor pin contact and devices that are inserted upside down or in the wrong position. This function protects your investment by preventing expensive chip damage due to operator error.

### EPROM and Flash Memory ID Detection and Search

Many EPROM and flash memories have a built-in device ID and manufacturer ID. The Dataman 48UXP can read the device's ID by using the hot key to detect the ID and compare with its database. It can then determine the chip's vendor and product number. This feature is especially useful with secondhand chips and devices that have had their part number removed (this function only applied to 28 pin or 32 pin EPROM and Flash).

### Auto-Sensing and Self-Programming

To meet mass-production requirements the Dataman 48UXP has implemented new technology in both its hardware and software. After entering the Mass-production Mode, the production line operator inserts a device into the ZIF socket. An LED on the Dataman 48UXP indicates the device is ready and the operator simply removes it and replaces it with a new one. No formal training is necessary, adding flexibility, saving time and money. In addition, the Dataman 48UXP's auto-sensing feature ensures the device has been inserted correctly and then automatically programs the device. Furthermore, in the mass-production mode the system keyboard is automatically disabled preventing the operator from making any inadvertent mistakes.

### Project File Save and Load

Users can create and save project files containing device selection, buffer data and programming set-up options. This project file can then be called upon at any time for future use without having to go through the setup procedure again. Your design file can easily be passed to production departments avoiding potential mistakes.

### Serialization Function

If your memory devices need individual serial numbers with different increment sequences and initial values, the Dataman 48UXP has an Auto Increment function. This simply increments the serial numbers in the buffer each time a new device is inserted. This saves time and money.

### User-Selectable Verify Voltage, One or Two-Pass Verification

The Dataman 48UXP lets you select the verify voltage after you have programmed the device, e.g., Vcc, Vcc  $\pm 5\%$ , Vcc  $\pm 10\%$ . The Vcc voltage can be 2.0V to 6.5V. This feature ensures that your device has been programmed properly, preventing failures due to programming errors and ensuring data retention.

### Non-DIL Device Support Through Versatile Converters

The Dataman 48UXP's universal pin driver capability lets it program all 48-pin DIL devices, including all single-chip Micro-controllers, without adapters. However due to the number of different packages besides DIL, we have developed over 100 different adapters to support these special-package devices.

### Current Limit and Pin Continuity Checks

The Dataman 48UXP has additional safety features such as a built-in current limit and pin continuity check function. This prevents damage from faulty chips during the programming cycle.

### Free Software Updates via Dataman Website

Keeping your programmer software up to date can be a costly business with some programmers. Dataman offers completely FREE updates for two years and latest software is always available from our website.

### Universal 44-pin PLCC, QFP, PSOP and TQFP Adapter Supports 44-pin Chips

The universal pin driver on the Dataman 48UXP enables you to support all 44-pin chips such as EPLD, EPROM, Flash, EPLD and Micro-controllers. You need only one 44-pin universal adapter which eliminates the need to buy multiple adapters and saves money. Moreover, different package devices within 48 pins will only require one adapter.



### Low Voltage Chip Support

The Dataman 48UXP supports 2.0V ~ 5.0V logic level input/output, and it can supply 2.0V~21V analog voltage (such as VCC). The Dataman 48UXP also supports lower than 2.7V low voltage devices, such as 1.8V, with the use of special adapters.

## Specifications

### Socket and Pin Driver

- 48-pin DIL/ ZIF socket with receptacle for 8-pin to 48-pin 300/ 600-mil devices.
- Four DACs for Vcc, Vpp1, Vpp2 and Vpp3 with 8-bit resolution. Software controllable rise time and current limit protection.
- Logic driver supports pull-up/ pull-down or high impedance on all 48 pins with 2.0V-5V level.

### Device Support

The Dataman 48UXP supports over 32,000 (April 2015) of the most popular devices in use today – with future devices being added every day. Dataman 48UXP coverage includes the following device types:

- Memory: PROM, EPROM, EEPROM, Flash, Serial PROM, NVRAM
- Logic: PAL, GAL, CEPAL, PEEL, CDLD, EPLD
- Others: OTP/Flash Micro-controllers

### Device Operations

Read, blank check, device insertion/ contact check, verify, checksum, EPROM ID check, compare, erase chip, function test, program, memory protect, device configuration setting, device search, edit buffer, mass production mode, modify vector, serialization, H/L byte buffer swap, buffer search.

### PLD Vector Tester

- Accepts JEDEC test vectors up to 48 pins
- 2500V/usec. rise time
- File format conversion
- JEDEC, POF, Binary, Intel HEX, Intel EXT HEX, Motorola S, HP 64000ABS, Straight Hex and TEKTRONIC Hex, Automatic detection and conversion.

## Package Includes

- **Dataman 48UXP Universal Programmer**
  - Dimensions: 310x170x40 mm (12.2x6.7x1.6 inches)
  - Weight: 1.9Kg (4.2lbs)
  - Auto-switching Power Supply
  - Input: 100 to 240 VAC
  - Power consumption: 25W
- FREE Universal 44-pin PLCC Adapter
- User manual
- Software
- Moulded USB cable
- Optional range of adapters and socket converters also available

## Warranty and Support

- 30 day, money back guarantee\* – if you don't like it send it back.
- Three year guarantee – Three years parts and labour warranty, on the 48UXP universal programmer
- Life-Time Technical Support – 48UXP technical support is available free via our website and telephone helpdesk for life.
- Two year free software updates – 48UXP software updates are available free for two years via our website.

\*Applies to orders from UK/US office only

[www.dataman.com](http://www.dataman.com)

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