User's Manual

Regarding the Downloading and Installing for the Software, Manuals and Labels / About the Usage of Open Source Software

Visit our website for user's manuals and software downloads.

The latest version of the software and the label data is available on the following URL:

www.smartdacplus.com/software/en/

Application software (Free download)

- SMARTDAC+ STANDARD
- Universal Viewer (for GX/GP and GM)
- Displays and prints the data that is generated by recorders. • Hardware Configurator (for GX/GP and GM)
- Creates, edits, saves, and prints setup data. You can also use it to exchange data with a GX/GP/GM and control it via communication.
- IP Address Configurator (for GM) Configures the communication parameters of the GM10.
- The label is to put on the front door of GX/GP. Print the label and write tag names on it. You can edit the label using Microsoft Office Excel 2003 or later.

Product user's manuals are available on the following URL:

www.smartdacplus.com/manual/en/

User's manuals for GX/GP/GM main unit

- GX10/GX20/GP10/GP20 Paperless Recorder User's Manual (IM 04L51B01-01EN)
- Data Acquisition System GM User's Manual (IM 04L55B01-01EN)
- GX20W Paperless Recorder Wireless Model User's Manual (IM 04L51B11-01EN)

Operating environment

Item	Description			
CPU	Windows 8.1, Windows 10	32-bit edition: Intel Core2 Duo E6300 or faster x64 or x86 processor. 64-bit edition: Intel Core2 Duo E6300 or faster x64 processor.		
	Windows 11	64-bit edition: Core-i5 or faster and 8th generation later Intel processor, 8GB or more		
Main memory	Windows 8.1, Windows 10	At least 2 GB.		
	Windows 11	At least 8 GB.		
Hard disk	Windows 8.1, Windows 10	Free space of at least 100 MB	Depending on the amount of data, you may need more memory.	
	Windows 11	Free space of at least 64 GB		
Display	A video card that is recommended for the OS and a display that is supported by the OS.			
Mouse	A mouse compatible with the OS			
Keyboard	A keyboard compatible with the OS			
Communication port	An Ethernet port compatible with the OS. The TCP/IP protocol must also be installed.			
Printer	A printer compatible with the OS. A printer driver that is recommended for the OS.			

OS	Edition	SP	32-bit/64-bit
Windows 8.1		Update	32-bit and 64-bit editions
	Pro	Update	32-bit and 64-bit editions
Windows 10	Home		32-bit and 64-bit editions
	Pro	\square	32-bit and 64-bit editions
	Enterprise/LTSB		32-bit and 64-bit editions
	Enterprise LTSC	\square	32-bit and 64-bit editions
Windows 11	Home	\square	64-bit editions
	Pro	\sim	64-bit editions

Browser Microsoft Edge, Googel Chrome

- To view the user's manual, you need to use Adobe Reader 7 or later by Adobe Systems.
- Exclude operating systems that Microsoft has finished supporting from the above list.

Installing

The following example shows how to install the Hardware Configurator. The other standard software can be installed in the same way. Licenses are not necessary for installing the "SMARTDAC+ STANDARD" software.

- **1.** Double-click the downloaded file to extract the files. The folder opens and the installer "Install.exe" appears.
- Install the programs as a Windows administrator. In case of Windows 7, right-click Install*.exe, and click
 Bue as administrator.

Run as administrator.

The install wizard starts.

- Follow the instructions on the screen.
- **4.** Enter the user name, company name, then click **Next**.
- 5. Choose your country, then click Next.
- 6. If you do not change the default installation directory, click **Next**.

The installation starts.

The default directory for saving files is: (Drive):\ Program Files\Yokogawa Electric Corporation\ SMARTDAC+ STANDARD Hardware Configurator For 64-bit OS: (Drive):\Program Files (x86)\Yokogawa Electric Corporation\SMARTDAC+ STANDARD Hardware Configurator

7. When the installation is completed, click Finish. Check that SMARTDAC+ STANDARD, Hardware Configurator has been added to the Start menu under All Programs.

Note management of the second se

- Before starting installation, make sure that all the resident programs are exited.
- To re-install the software, first uninstall it, then reinstall it.
- The User's manual is installed with the software. To view it, on the Help menu, click User's Manual. Or, on the Windows Start menu, select All Programs, SMARTDAC+ STANDARD, then double-click User's Manual. Adobe Reader versions 7.0 or higher is necessary for browsing manuals.





QR code

The product may have a QR Code pasted for efficient plant maintenance work and asset information management. It enables confirming the specifications of purchased products and user's manuals.For more details, please refer to the following URL.

https://www.yokogawa.com/qr-code QR Code is a registered trademark of DENSO WAVE INCORPORATED.

Trademarks

- SMARTDAC+ is registered trademarks or trademarks of Yokogawa Electric Corporation.
- Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States.
- Pentium is a trademark of Intel Corporation in the United States and/or other countries.
- Adobe and Acrobat are registered trademarks or trademarks of Adobe Systems Incorporated.
- · Google Chrome is registered trademark of Google LLC.
- Kerberos is a trademark of MIT.
- Bluetooth is a registered trademark or trademark of Bluetooth SIG, Inc.
- Company and product names that appear in this manual are registered trademarks or trademarks of their respective holders.
- The company and product names used in this manual are not accompanied by the registered trademark or trademark symbols ([®] and [™]).

YOKOGAWA

YOKOGAWA ELECTRIC CORPORATION Headquarters 2-9-32, Naka-cho Musashino-shi, Tokyo 180-8750 JAPAN YOKOGAWA CORPORATION OF AMERICA Head office and for product sales 2 Dart Road, Newnan, Georgia 30265, USA

YOKOGAWA EUROPE B.V.

Headquarters Euroweg 2, 3825 HD Amersfoort, THE NETHERLANDS

www.yokogawa.com/ns

All Rights Reserved, Copyright © 2012 Yokogawa Electric Corporation

About the Usage of Open Source Software

Expat

The report template function of the following products uses Expat source code for report creation. In accordance with the Expat license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Heimdal

The password-management function of the following products uses Heimdal source code for AES authentication key generation. In accordance with the Heimdal license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module SMARTDAC+ STANDARD Universal Viewer

Copyright (c) 1995 - 2014 Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm, Sweden). All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

TCP/IP Software

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

The TCP/IP software of this product and the document concerning the TCP/IP software have been developed/created by YOKOGAWA based on the BSD Networking Software, Release 1 that has been licensed from the Regents of the University of California.

eFont

The monitoring function of the following products uses eFont data for the character representation.

In accordance with the eFont license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10,GX20,GP10,GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

(c) Copyright 2000-2001 /efont/ The Electronic Font Open Laboratory. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice,

- Redistributions of source code must retain the above copyright house, this list of conditions and the following disclaimer.
 Dedistributions is biner and the source and the source approximate
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the team nor the names of its contributors may be used to endorse or promote products derived from this font without specific prior written permission.

THIS FONT IS PROVIDED BY THE TEAM AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE TEAM OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS FONT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE

JSEncrypt

The password encryption part of the web applications of the following product uses JSEncrypt source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

JSEncrypt

https://github.com/travist/jsencrypt/blob/master/LICENSE.txt

File: src/LICENSE.txt The MIT License (MIT) Copyright (c) 2013 AllPlayers.com

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

File: lib/jsrsasign/LICENSE.txt

CONTAINS CODE FROM YUI LIBRARY SEE LICENSE @ http:// yuilibrary.com/license/

The 'jsrsasign'(RSA-Sign JavaScript Library) License Copyright (c) 2010-2013 Kenji Urushima

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights

to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED

TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

File: lib/jsbn/LICENSE.txt

Licensing

This software is covered under the following copyright:

- Copyright (c) 2003-2005 Tom Wu
- All Rights Reserved.
- Permission is hereby granted, free of charge, to any person obtaining
- a copy of this software and associated documentation files (the
- "Software"), to deal in the Software without restriction, including
- without limitation the rights to use, copy, modify, merge, publish,
- distribute, sublicense, and/or sell copies of the Software, and to
- permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be

- included in all copies or substantial portions of the Software.
- THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND,
- EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY
- WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- IN NO EVENT SHALL TOM WU BE LIABLE FOR ANY SPECIAL, * INCIDENTAL
- INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER
- RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF
- THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT
- OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.
- In addition, the following condition applies:

All redistributions must retain an intact copy of this copyright notice

and disclaimer.

Address all questions regarding this license to:

Tom Wu

tjw@cs.Stanford.EDU

File: lib/asn1js/LICENSE.txt

ASN.1 JavaScript decoder

Copyright (c) 2008-2013 Lapo Luchini <lapo@lapo.it>

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF

USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

jQuery

The monitor part of the web applications of the following product uses jQuery source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

Copyright JS Foundation and other contributors, https://js.foundation/

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

lodash

The monitor part of the web applications of the following product uses lodash source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

The MIT License

Copyright JS Foundation and other contributors https://js.foundation/>

Based on Underscore.js, copyright Jeremy Ashkenas, DocumentCloud and Investigative Reporters & Editors <http://underscorejs.org/>

This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at https://github.com/lodash/lodash

The following license applies to all parts of this software except as documented below:

====

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

====

CC0: http://creativecommons.org/publicdomain/zero/1.0/

====

Files located in the node_modules and vendor directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

Moment.js

The monitor part of the web applications of the following product uses Moment.js source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

Copyright (c) JS Foundation and other contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

core-js

The monitor part of the web applications of the following product uses core-js source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

Copyright (c) 2014-2019 Denis Pushkarev

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

ES6-Promise

The monitor part of the web applications of the following product uses ES6-Promise source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder

SMARTDAC+ GM10 Data Acquisition Module

Copyright (c) 2014 Yehuda Katz, Tom Dale, Stefan Penner and contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

classList.js

The monitor part of the web applications of the following product uses classList.js source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

This is free and unencumbered software released into the public domain.

Anyone is free to copy, modify, publish, use, compile, sell, or distribute this software, either in source code form or as a compiled binary, for any purpose, commercial or non-commercial, and by any means.

In jurisdictions that recognize copyright laws, the author or authors of this software dedicate any and all copyright interest in the software to the public domain. We make this dedication for the benefit of the public at large and to the detriment of our heirs and successors. We intend this dedication to be an overt act of relinquishment in perpetuity of all present and future rights to this software under copyright law.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

For more information, please refer to http://unlicense.org/

whatwg-fetch

The monitor part of the web applications of the following product uses whatwg-fetch source code. In accordance with the MIT license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

Copyright © 2018 WHATWG (Apple, Google, Mozilla, Microsoft). This work is licensed under a Creative Commons Attribution 4.0 International License:

Attribution 4.0 International

Creative Commons Corporation ("Creative Commons") is not a law firm and does not provide legal services or legal advice. Distribution of Creative Commons public licenses does not create a lawyer-client or other relationship. Creative Commons makes its licenses and related information available on an "as-is" basis. Creative Commons gives no warranties regarding its licenses, any material licensed under their terms and conditions, or any related information. Creative Commons disclaims all liability for damages resulting from their use to the fullest extent possible.

Using Creative Commons Public Licenses

Creative Commons public licenses provide a standard set of terms and conditions that creators and other rights holders may use to share original works of authorship and other material subject to copyright and certain other rights specified in the public license below. The following considerations are for informational purposes only, are not exhaustive, and do not form part of our licenses.

Considerations for licensors: Our public licenses are intended for use by those authorized to give the public permission to use material in ways otherwise restricted by copyright and certain other rights. Our licenses are irrevocable. Licensors should read and understand the terms and conditions of the license they choose before applying it. Licensors should also secure all rights necessary before applying our licenses so that the public can reuse the material as expected. Licensors should clearly mark any material not subject to the license. This includes other CC-licensed material, or material used under an exception or limitation to copyright. More considerations for licensors: wiki.creativecommons.org/Considerations_for_licensors

Considerations for the public: By using one of our public licenses, a licensor grants the public permission to use the licensed material under specified terms and conditions. If the licensor's permission is not necessary for any reason--for example, because of any applicable exception or limitation to copyright--then that use is not regulated by the license. Our licenses grant only permissions under copyright and certain other rights that a licensor has authority to grant. Use of the licensed material may still be restricted for other reasons, including because others have copyright or other rights in the material. A licensor may make special requests, such as asking that all changes be marked or described. Although not required by our licenses, you are encouraged to respect those requests where reasonable. More_ considerations for the public:

wiki.creativecommons.org/Considerations_for_licensees

Creative Commons Attribution 4.0 International Public License

By exercising the Licensed Rights (defined below), You accept and agree to be bound by the terms and conditions of this Creative Commons Attribution 4.0 International Public License ("Public License"). To the extent this Public License may be interpreted as a contract, You are granted the Licensed Rights in consideration of Your acceptance of these terms and conditions, and the Licensor grants You such rights in consideration of benefits the Licensor receives from making the Licensed Material available under these terms and conditions.

Section 1 -- Definitions.

- a. Adapted Material means material subject to Copyright and Similar Rights that is derived from or based upon the Licensed Material and in which the Licensed Material is translated, altered, arranged, transformed, or otherwise modified in a manner requiring permission under the Copyright and Similar Rights held by the Licensor. For purposes of this Public License, where the Licensed Material is a musical work, performance, or sound recording, Adapted Material is always produced where the Licensed Material is synched in timed relation with a moving image.
- b. Adapter's License means the license You apply to Your Copyright and Similar Rights in Your contributions to Adapted Material in accordance with the terms and conditions of this Public License.
- c. Copyright and Similar Rights means copyright and/or similar rights closely related to copyright including, without limitation, performance, broadcast, sound recording, and Sui Generis Database Rights, without regard to how the rights are labeled or categorized. For purposes of this Public License, the rights specified in Section 2(b)(1)-(2) are not Copyright and Similar Rights.
- d. Effective Technological Measures means those measures that, in the absence of proper authority, may not be circumvented under laws fulfilling obligations under Article 11 of the WIPO Copyright Treaty adopted on December 20, 1996, and/or similar international agreements.
- e. Exceptions and Limitations means fair use, fair dealing, and/or any other exception or limitation to Copyright and Similar Rights that

applies to Your use of the Licensed Material.

- f. Licensed Material means the artistic or literary work, database, or other material to which the Licensor applied this Public License.
- g. Licensed Rights means the rights granted to You subject to the terms and conditions of this Public License, which are limited to all Copyright and Similar Rights that apply to Your use of the Licensed Material and that the Licensor has authority to license.
- h. Licensor means the individual(s) or entity(ies) granting rights under this Public License.
- i. Share means to provide material to the public by any means or process that requires permission under the Licensed Rights, such as reproduction, public display, public performance, distribution, dissemination, communication, or importation, and to make material available to the public including in ways that members of the public may access the material from a place and at a time individually chosen by them.
- j. Sui Generis Database Rights means rights other than copyright resulting from Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, as amended and/or succeeded, as well as other essentially equivalent rights anywhere in the world.
- k. You means the individual or entity exercising the Licensed Rights under this Public License. Your has a corresponding meaning.

Section 2 -- Scope.

- a. License grant.
 - Subject to the terms and conditions of this Public License, the Licensor hereby grants You a worldwide, royalty-free, nonsublicensable, non-exclusive, irrevocable license to exercise the Licensed Rights in the Licensed Material to:
 - a. reproduce and Share the Licensed Material, in whole or in part; and
 - b. produce, reproduce, and Share Adapted Material.
 - Exceptions and Limitations. For the avoidance of doubt, where Exceptions and Limitations apply to Your use, this Public License does not apply, and You do not need to comply with its terms and conditions.
 - 3. Term. The term of this Public License is specified in Section 6(a).
 - 4. Media and formats; technical modifications allowed. The Licensor authorizes You to exercise the Licensed Rights in all media and formats whether now known or hereafter created, and to make technical modifications necessary to do so. The Licensor waives and/or agrees not to assert any right or authority to forbid You from making technical modifications necessary to exercise the Licensed Rights, including technical modifications necessary to circumvent Effective Technological Measures. For purposes of this Public License, simply making modifications authorized by this Section 2(a) (4) never produces Adapted Material.
 - 5. Downstream recipients.
 - a. Offer from the Licensor -- Licensed Material. Every recipient of the Licensed Material automatically receives an offer from the Licensor to exercise the Licensed Rights under the terms and conditions of this Public License.
 - b. No downstream restrictions. You may not offer or impose any additional or different terms or conditions on, or apply any Effective Technological Measures to, the Licensed Material if doing so restricts exercise of the Licensed Rights by any recipient of the Licensed Material.
 - 6. No endorsement. Nothing in this Public License constitutes or may be construed as permission to assert or imply that You are, or that Your use of the Licensed Material is, connected with, or sponsored, endorsed, or granted official status by, the Licensor or others designated to receive attribution as provided in Section 3(a)(1)(A)(i).

- b. Other rights.
 - Moral rights, such as the right of integrity, are not licensed under this Public License, nor are publicity, privacy, and/or other similar personality rights; however, to the extent possible, the Licensor waives and/or agrees not to assert any such rights held by the Licensor to the limited extent necessary to allow You to exercise the Licensed Rights, but not otherwise.
 - 2. Patent and trademark rights are not licensed under this Public License.
 - 3. To the extent possible, the Licensor waives any right to collect royalties from You for the exercise of the Licensed Rights, whether directly or through a collecting society under any voluntary or waivable statutory or compulsory licensing scheme. In all other cases the Licensor expressly reserves any right to collect such royalties.

Section 3 -- License Conditions.

Your exercise of the Licensed Rights is expressly made subject to the following conditions.

- a. Attribution.
 - 1. If You Share the Licensed Material (including in modified form), You must:
 - a. retain the following if it is supplied by the Licensor with the Licensed Material:
 - i. identification of the creator(s) of the Licensed Material and any others designated to receive attribution, in any reasonable manner requested by the Licensor (including by pseudonym if designated);
 - ii. a copyright notice;
 - iii. a notice that refers to this Public License;
 - iv. a notice that refers to the disclaimer of warranties;
 - v. a URI or hyperlink to the Licensed Material to the extent reasonably practicable;
 - b. indicate if You modified the Licensed Material and retain an indication of any previous modifications; and
 - c. indicate the Licensed Material is licensed under this Public License, and include the text of, or the URI or hyperlink to, this Public License.
 - 2. You may satisfy the conditions in Section 3(a)(1) in any reasonable manner based on the medium, means, and context in which You Share the Licensed Material. For example, it may be reasonable to satisfy the conditions by providing a URI or hyperlink to a resource that includes the required information.
 - If requested by the Licensor, You must remove any of the information required by Section 3(a)(1)(A) to the extent reasonably practicable.
 - 4. If You Share Adapted Material You produce, the Adapter's License You apply must not prevent recipients of the Adapted Material from complying with this Public License.

Section 4 -- Sui Generis Database Rights.

Where the Licensed Rights include Sui Generis Database Rights that apply to Your use of the Licensed Material:

 a. for the avoidance of doubt, Section 2(a)(1) grants You the right to extract, reuse, reproduce, and Share all or a substantial portion of the contents of the database;

- b. if You include all or a substantial portion of the database contents in a database in which You have Sui Generis Database Rights, then the database in which You have Sui Generis Database Rights (but not its individual contents) is Adapted Material; and
- c. You must comply with the conditions in Section 3(a) if You Share all or a substantial portion of the contents of the database.

For the avoidance of doubt, this Section 4 supplements and does not replace Your obligations under this Public License where the Licensed Rights include other Copyright and Similar Rights.

Section 5 -- Disclaimer of Warranties and Limitation of Liability.

- a. UNLESS OTHERWISE SEPARATELY UNDERTAKEN BY THE LICENSOR, TO THE EXTENT POSSIBLE, THE LICENSOR OFFERS THE LICENSED MATERIAL AS-IS AND AS-AVAILABLE, AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE LICENSED MATERIAL, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHER. THIS INCLUDES, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OR ABSENCE OF ERRORS, WHETHER OR NOT KNOWN OR DISCOVERABLE. WHERE DISCLAIMERS OF WARRANTIES ARE NOT ALLOWED IN FULL OR IN PART, THIS DISCLAIMER MAY NOT APPLY TO YOU.
- b. TO THE EXTENT POSSIBLE, IN NO EVENT WILL THE LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE) OR OTHERWISE FOR ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY, OR OTHER LOSSES, COSTS, EXPENSES, OR DAMAGES ARISING OUT OF THIS PUBLIC LICENSE OR USE OF THE LICENSED MATERIAL, EVEN IF THE LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES, COSTS, EXPENSES, OR DAMAGES. WHERE A LIMITATION OF LIABILITY IS NOT ALLOWED IN FULL OR IN PART, THIS LIMITATION MAY NOT APPLY TO YOU.
- c. The disclaimer of warranties and limitation of liability provided above shall be interpreted in a manner that, to the extent possible, most closely approximates an absolute disclaimer and waiver of all liability.

Section 6 -- Term and Termination.

- a. This Public License applies for the term of the Copyright and Similar Rights licensed here. However, if You fail to comply with this Public License, then Your rights under this Public License terminate automatically.
- b. Where Your right to use the Licensed Material has terminated under Section 6(a), it reinstates:
- c. For the avoidance of doubt, the Licensor may also offer the Licensed Material under separate terms or conditions or stop distributing the Licensed Material at any time; however, doing so will not terminate this Public License.
- d. Sections 1, 5, 6, 7, and 8 survive termination of this Public License.

Section 7 -- Other Terms and Conditions.

- a. The Licensor shall not be bound by any additional or different terms or conditions communicated by You unless expressly agreed.
- b. Any arrangements, understandings, or agreements regarding the Licensed Material not stated herein are separate from and independent of the terms and conditions of this Public License.

Section 8 -- Interpretation.

- a. For the avoidance of doubt, this Public License does not, and shall not be interpreted to, reduce, limit, restrict, or impose conditions on any use of the Licensed Material that could lawfully be made without permission under this Public License.
- b. To the extent possible, if any provision of this Public License is deemed unenforceable, it shall be automatically reformed to the minimum extent necessary to make it enforceable. If the provision cannot be reformed, it shall be severed from this Public License without affecting the enforceability of the remaining terms and conditions.
- c. No term or condition of this Public License will be waived and no failure to comply consented to unless expressly agreed to by the Licensor.
- d. Nothing in this Public License constitutes or may be interpreted as a limitation upon, or waiver of, any privileges and immunities that apply to the Licensor or You, including from the legal processes of any jurisdiction or authority.

Creative Commons is not a party to its public licenses. Notwithstanding, Creative Commons may elect to apply one of its public licenses to material it publishes and in those instances will be considered the "Licensor." Except for the limited purpose of indicating that material is shared under a Creative Commons public license or as otherwise permitted by the Creative Commons policies published at creativecommons.org/policies, Creative Commons does not authorize the use of the trademark "Creative Commons" or any other trademark or logo of Creative Commons without its prior written consent including, without limitation, in connection with any unauthorized modifications to any of its public licenses or any other arrangements, understandings, or agreements concerning use of licensed material. For the avoidance of doubt, this paragraph does not form part of the public licenses.

Creative Commons may be contacted at creativecommons.org.

MD5

The following products uses MD5 source code. In accordance with the MD5 license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, GX20W Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

· RSA Data Security's MD5 License

RSA Data Security, Inc., MD5 message-digest algorithm Copyright (C) 1991-2, RSA Data Security, Inc. Created 1991. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function. License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

LIBSVM

The Equipment / Quality Prediction function of the following products uses LIBSVM source code.

In accordance with the LIBSVM license agreement, the copyright notice, redistribution conditions, and license are listed below.

SMARTDAC+ GX10, GX20, GP10, GP20, Paperless Recorder SMARTDAC+ GM10 Data Acquisition Module

Copyright (c) 2000-2021 Chih-Chung Chang and Chih-Jen Lin All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither name of copyright holders nor the names of its contributors ay be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

全字庫屬性資料集中文碼對照表

For the following products, refer to "全字庫屬性資料集中文碼 對照表." In accordance with the CNS11643 license, the source reference is listed.

SMARTDAC+ GX10, GX20, GP10, GP20 Paperless Recorder

Ministry of Digital Affairs, the full repertoire, https://www.cns11643.gov.tw