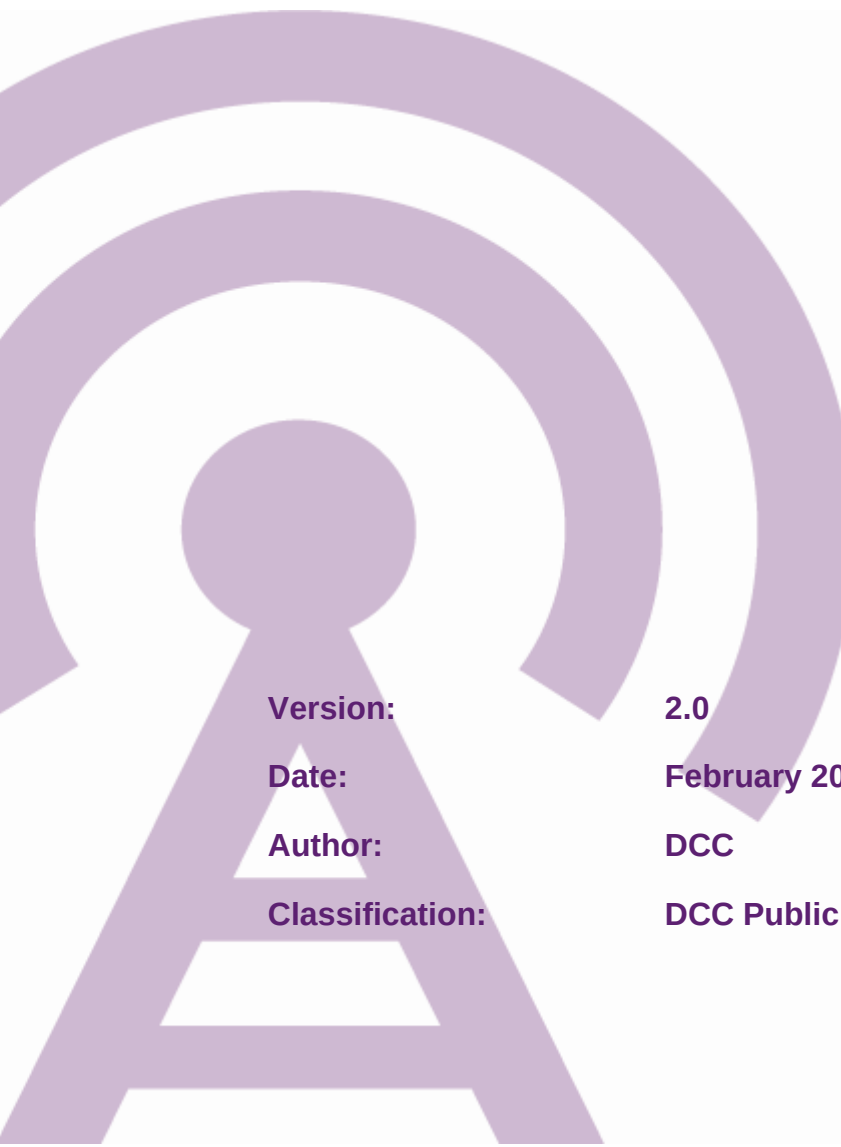


Communications Hub Datasheet

CSP N – EDM I SBCH Rev D & Rev E Standard 420



Version:	2.0
Date:	February 2020
Author:	DCC
Classification:	DCC Public

Revision History

Revision Date	Revision Number	Summary of Change
December 2018	1.0	Initial DCC release
February 2020	2.0	Updates to align with ICHIS v2.0 / 2.1 and extend this datasheet to cover Rev D & Rev E models

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1 Single EDM I Standard 420 Communications Hub

1.1 Photographs

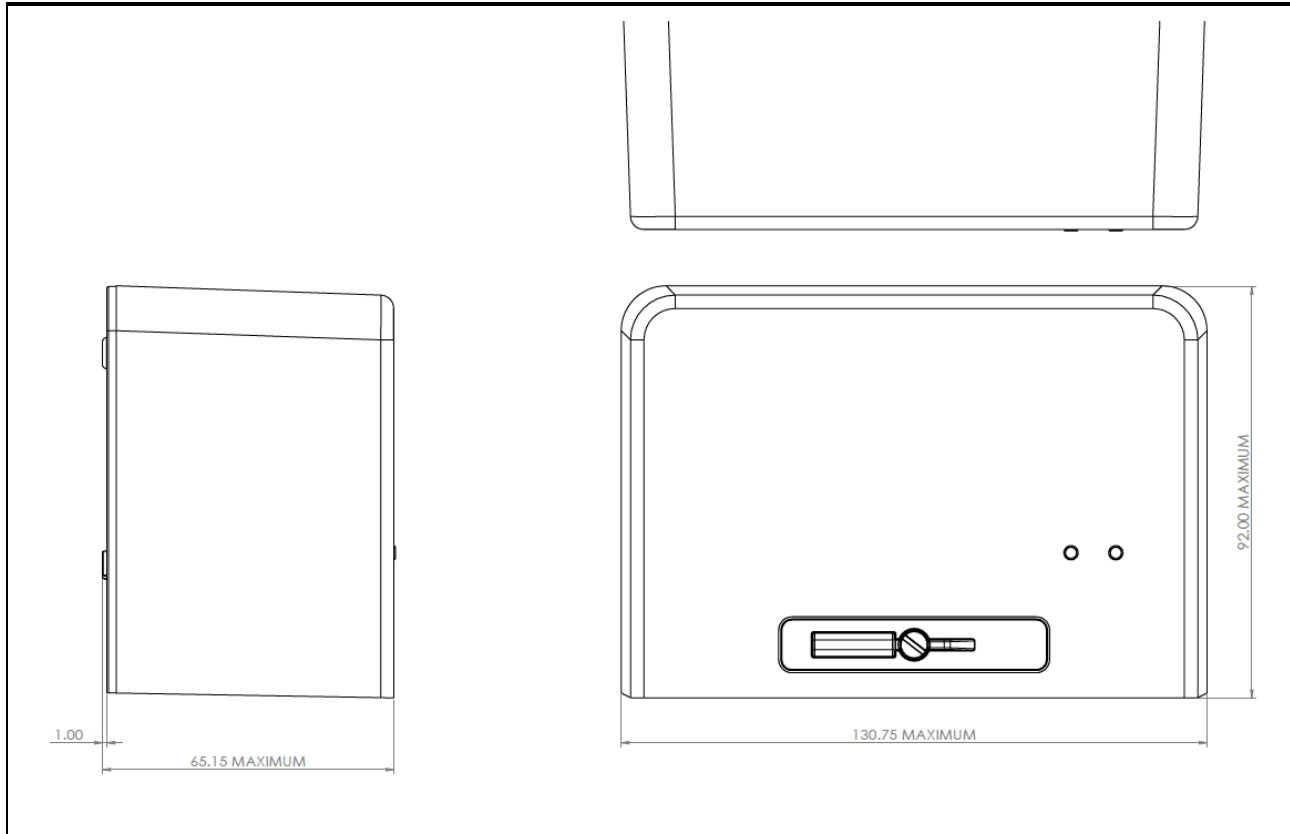
Rev D



Rev E



1.2 Comms Hub Enclosure Engineering Drawing



1.3 General Specification

For terms and abbreviations used in this document please see the DCC document: Joint HAN Radio Testing Methodology (JTM v3.2).

https://www.smartdcc.co.uk/media/1974/joint_han_radio_testing_methodology_v33.pdf

Specification	Description										
Dimensions	Height from bottom face: 92mm Height from ICHIS datum: 80mm Depth: 65mm Width: 131mm										
Weight	200g										
Environment Protection	IP Rating: IP53 Ambient temperature limits: -20°C to 55°C										
SM WAN specification	Standard: ETSI EN 300 113 V2.2.1(2017-04) Frequency Range: Transmit: 412-414 and 422-424 MHz Receive: 420-425 MHz TRP: 1W Maximum.										
HAN Specification	<table border="1"> <thead> <tr> <th colspan="2">Transceiver</th></tr> </thead> <tbody> <tr> <td>TRP: 2.4GHz</td><td>>3dBm</td></tr> <tr> <td>TRS: 2.4GHz</td><td><-91dBm</td></tr> <tr> <td>MAPL : 2.4GHz</td><td>>96dB</td></tr> <tr> <td>Directivity</td><td>Omni</td></tr> </tbody> </table>	Transceiver		TRP: 2.4GHz	>3dBm	TRS: 2.4GHz	<-91dBm	MAPL : 2.4GHz	>96dB	Directivity	Omni
Transceiver											
TRP: 2.4GHz	>3dBm										
TRS: 2.4GHz	<-91dBm										
MAPL : 2.4GHz	>96dB										
Directivity	Omni										
Power Consumption (W)	6W maximum 1W typical										

Specification	Description
Visual Indicator	SM WAN_LED (Left) SM HAN_LED (Right)
ICHIS Connections	Pins 1, 2: DC input Pins 3, 4: COM Pin 5: CH_PR (Communications Hub Present) Pin 6: MT_PR (Meter Present) Pin 7: TX_MT Pin 8: RX_MT As defined by ICHIS 2.0 All other pins not fitted
Labelling	See section 1.4
Packing	See section 1.5 to 1.7

1.4 Comms Hub Labelling / Artwork Engineering Drawing

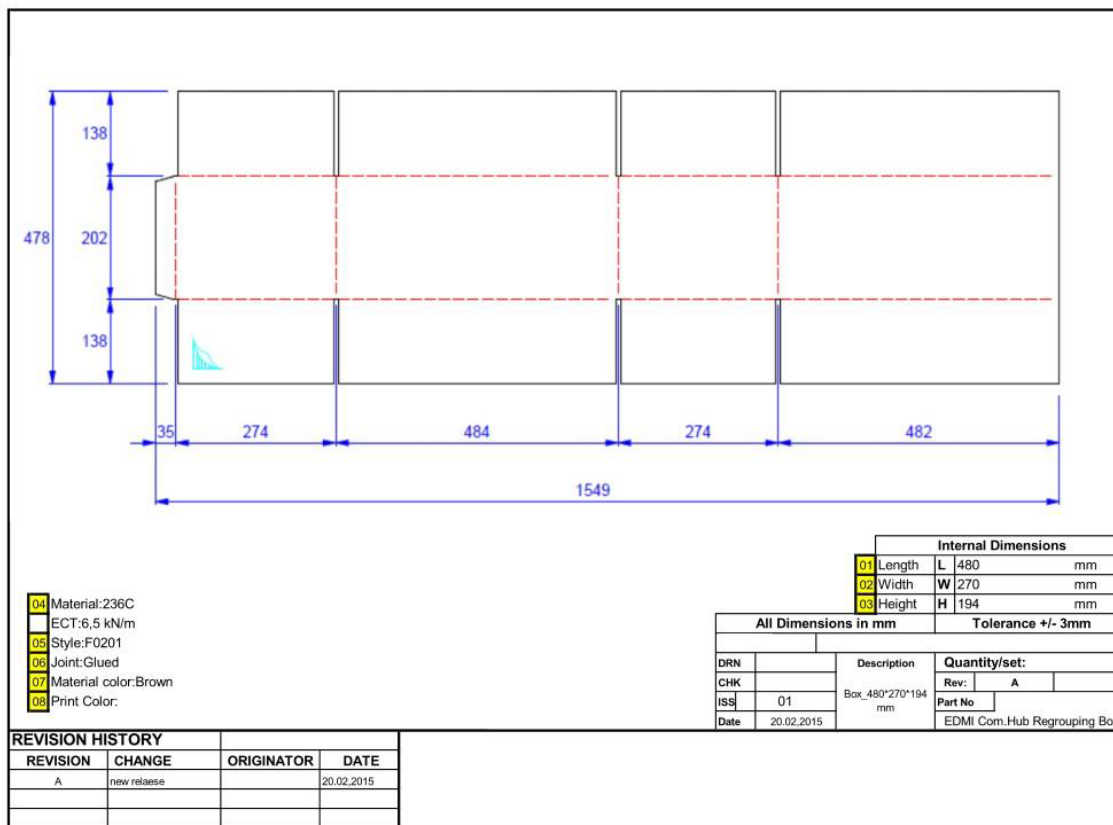
Rev D



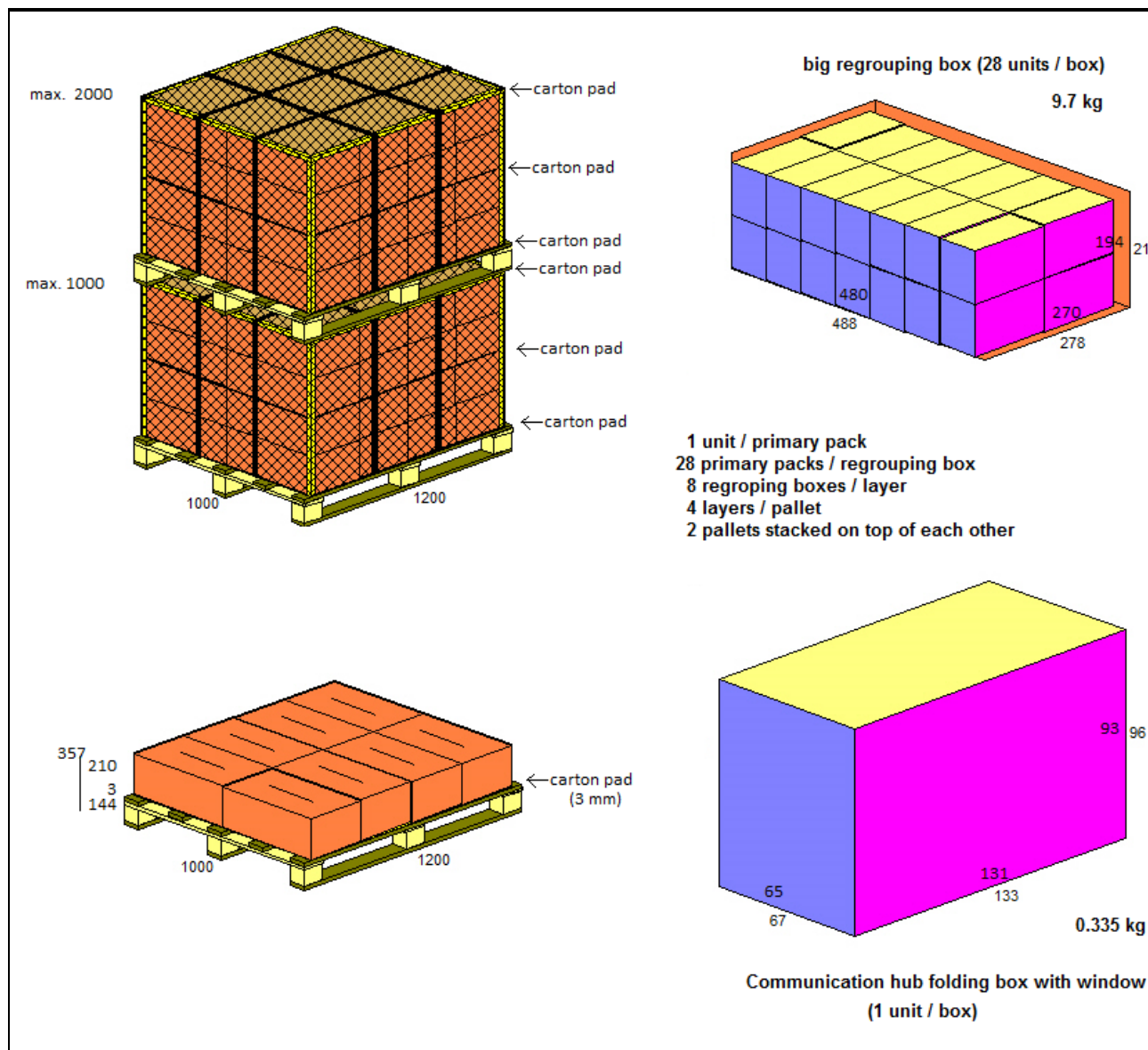
Rev E



1.6 Packaging Drawing (Carton)



1.7 Packaging Drawing (Pallet Loading)



2 Appendix - Noise

The Noise limits are defined in the Intimate Communications Hub Interface Specification which is published together with the ICHIS Test Specification on the SmartDCC Ltd website at the following location:

<https://www.smartdcc.co.uk/document-centre/communications-hubs/intimate-communications-hub-interface-specification/>