Swin blocks with Group Rational KANs

Left block (orange): Layer Norm → W-MSA → (+) → Layer Norm → GR-KAN → (+)

Right block (yellow): Layer Norm → SW-MSA → (+) → Layer Norm → GR-KAN → (+)

Patch Embedding

Merge

H x W x C

H x W x 24

Output
H x W x Num Classes

H/2 x W/2 x 24

H/2 x W/2 x 24

H/4 x W/4 x 48

H/4 x W/4 x 48

H/8 x W/8 x 96

H/8 x W/8 x 96

H/16 x W/16 x 192

H/32 x W/32 x 384   H/16 x W/16 x 192
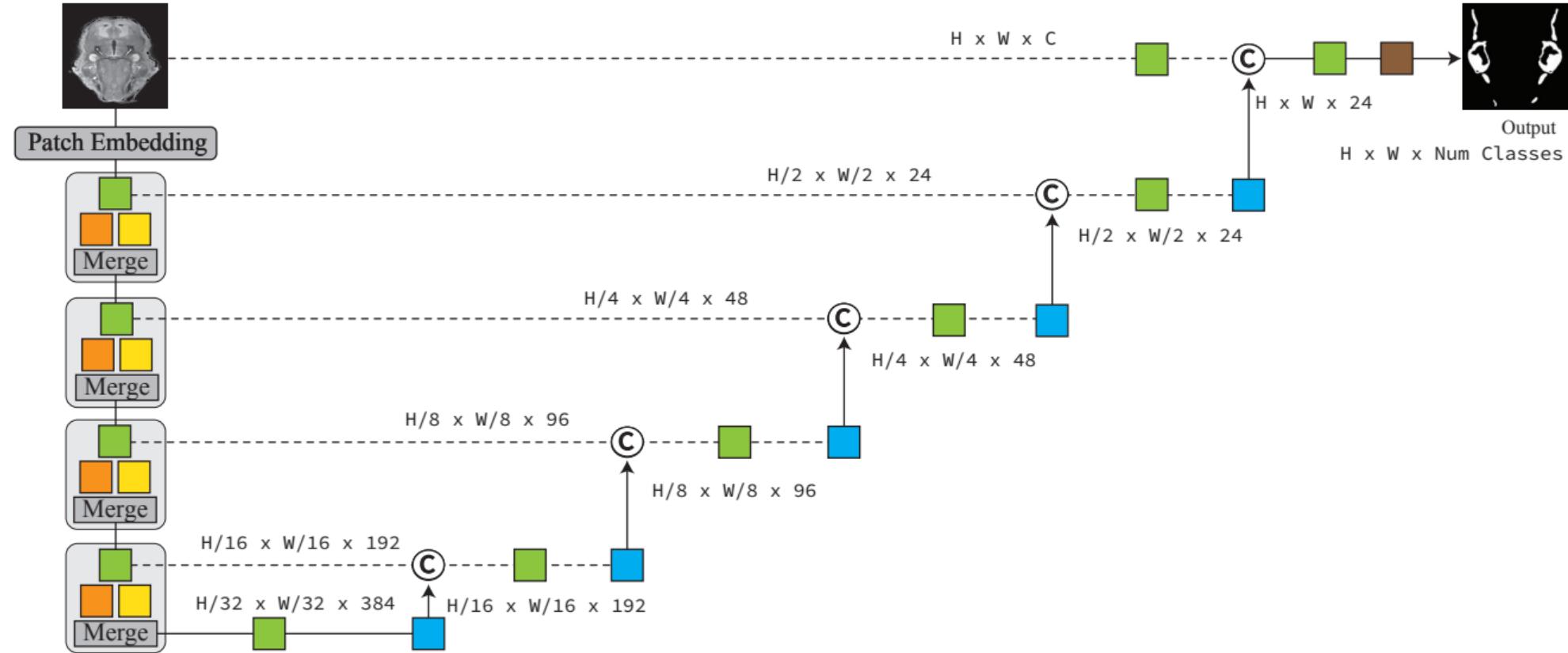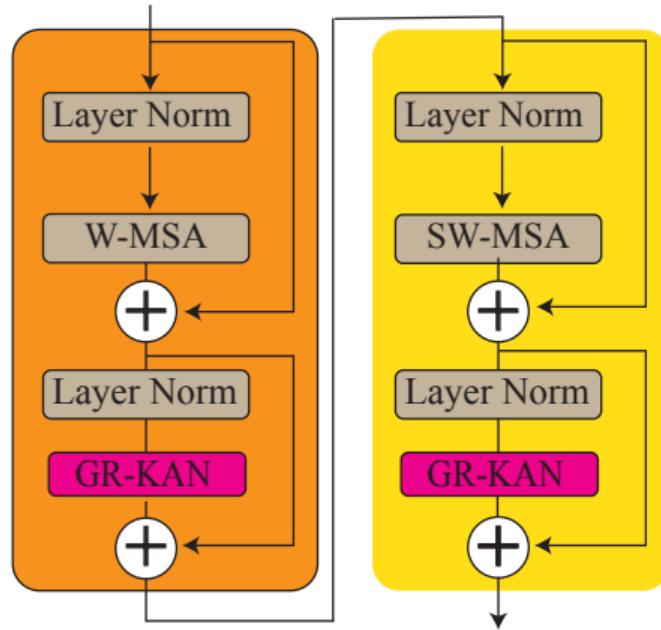
■ Residual Convolution Block (3x3 Conv + Instance Norm + Act + 3x3 Conv + Act)   ■■ Swin + GR-KAN Blocks

■ GR-KAN (GR Act + Linear + GR Act + Linear)   ----→ Skip Connections   Ⓒ Concatenation   ■ Deconv Block   ■ 1x1 Conv