

**SUPPLEMENTARY TABLE 1.** Network details for generator network.

Layers	Output size	Number of channels	Convolutional kernels
Convolution 1	32x32x32	32	3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Dense block 1	32x32x32	16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Transition layer 1	16x16x16	16	3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Dense block 2	16x16x16	16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Transition layer 2	8x8x8	16	3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Dense block 3	8x8x8	16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Transition layer 1	4x4x4	16	3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Dense block 4	4x4x4	16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Transition layer 3	2x2x2	16	3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
Dense block 5	2x2x2	16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv
		16	1x1x1 conv, 3x3x3 conv

Transition up layer 1	4x4x4	<i>16</i>	3x3x3 deconv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Dense block 6	4x4x4	<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Transition up layer 2	8x8x8	<i>16</i>	3x3x3 deconv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Dense block 7	8x8x8	<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Transition up layer 3	16x16x16	<i>16</i>	3x3x3 deconv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Dense block 8	16x16x16	<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Transition up layer 4	32x32x32	<i>16</i>	3x3x3 deconv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Dense block 9	32x32x32	<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
		<i>16</i>	1x1x1 conv, 3x3x3 conv
Convolution 2	32x32x32	1	9x9x9 conv